

The significance of reminiscences in the life and support of seniors

Oldřich Müller

Abstract: *The text is concerned with the standing of reminiscences in the life and support of persons of senior age. Special emphasis is laid on seniors dependent on care, in particular for health reasons (viz dementia of Alzheimer type). At the same time the significance of involutional and disease-caused loss of memory are differentiated. Attention is also devoted to the possibilities of targeted application of reminiscences in institutional care ensured by special educators, directed at prevention and therapy (reminiscence therapy).*

Keywords: *Reminiscence, person of senior age, memory loss, involution, disease, dementia of Alzheimer type, dependence on care, prevention, therapy, reminiscence therapy, special education, gerontagogics*

1 Introduction

The beginning of the 21st century can be characterized, besides others, by significant aging of the population, in particular in the so-called developed countries. According to a report of the EU (published 15. 5. 2012) a substantial change is expected in the age structure of the population of the Union in the coming decades. Its total number will not increase dramatically up to the year 2060 (the current number of 502 million will grow only to 517 million); however the population will be greatly older – 30% Europeans will belong to the age group 65 years and over (Greying Europe – We need to prepare now, 2012). This trend is also valid for the Czech Republic. According to the Prediction of the Population of the Czech Republic up to the year 2050 elaborated by the Czech Bureau of Statistics at the end of the year 2003 there will be intense growth of the number of people over 65 years of age, while on the contrary,

the number of children will diminish. According to its median variant there will be more than double the number of the population over the age of 65, while the number of the oldest persons, i.e. over 85, will grow to five times the current number (Svobodová, 2005). The above-mentioned phenomenon will manifest itself in various social spheres, in which there must be a specific method of resolving the problems of life quality of all persons of senior age.

With regard to the fact that life quality, besides others, is dependent on the possibilities of the development (maintenance) of human potential and competency in a given person (enabling further realization, maintaining a certain level of psychic and physical health, being a part of a safe environment), its solution grows in significance in spheres and disciplines in which it proceeds and whose subject of interest is a lifetime study. One of such disciplines is special education – gerontagogics which is concerned with an independent method of study of the stated age structure.

As an important partial theme in the solution of the possibilities of development (maintenance) of the human potential and competence of persons of senior age (especially of seniors dependent on care) appears to be in this respect the ascertainment and description of all pieces of knowledge associated with the application of reminiscences. This theme entered professional consciousness at the time that Erik Erikson presented his concept of eight stages of human psycho social development and when Robert Butler (American gerontologist and psychiatrist as one of the first persons called attention to the existence of discrimination based on age and who began systematically to use reminiscences – viz method Life Review) published the results of his longitudinal research of healthy seniors from which ensued that the latter endeavoured naturally to recapitulate and comprehend their own lives, which can be exploited also for their support (Butler 1963). And it is this very theme that became crucial in the following text.

The text *The Significance of Reminiscences in the Life and Support of Seniors* has not only the ambition to link up conceptually and in content to the preceding texts of the author (Müller), but also to attempt to explore deeper the given field of problems – accordingly to outline related novel themes, place them into new associations and expand them in line with the latest scientific knowledge. All of this is to be done with necessary emphasis on the fact that the possibilities of the presented article are small and far from the factually existing information (which all the more, deserve a separate monograph).

In the processing of the texts use was made of theoretical methods of description and comparison, subsequent generalization and classification of information, including the application of own experience and preceding scientific research work of the author.

2 Reminiscences at Old Age

At old age occurs one of the crises which come during the period of human life. Such a crisis can become a threat in that if not overcome, it would impair required life integrity, successiveness and the further meaning of life. This is also confirmed by E. H. Erikson (psychologist and psychoanalyst): an individual passes through eight stages from his birth till death (later on Erikson supplemented a ninth stage), while at the same time each stage is marked by a crisis of identity, which must be overcome (without commensurate personal identity no mature ego can develop); *in late adulthood*, occurring after the age of 60 and including old age, this crisis can be evoked by a *conflict between the integrity of one's own personality* (or by the state of fulfilment of the tasks of the preceding stages, state of productiveness and meaningfulness of life, state of maturity encompassing sagacious equilibrium of one with oneself and with one's imperfectness, state of positive reminiscences and the like) *and scepticism about one's past* (threatening genesis of a state of hopelessness, disappointment, despair) (Erikson, 2002, 1999).

It is evident that at old age, a time at which a degree of satisfaction with oneself and one's life acquires extraordinary significance (according to Erikson the conflict between integrity and scepticism right up to sheer despair), an important regulating role is played by continual reminiscences and contemplation issuing from them (which fact is confirmed by a line of authors – e.g. Butler, 1968, 1980, Schweitzer, 2008, Gibson, 2011). It is thus, because these reminiscences are (can be) a natural and effective means of balancing an often interrupted life sequence (originating e.g. from termination of employment, moving away from original place of residence to institutional care, sudden illness, etc.).

According to comparative and research findings of the author, reminiscences of oneself at old age help (or can help):

- to maintain life perspectives (satisfaction/dissatisfaction with one's own past can, at least, motivate aspiration),
- to shape, comprehend and accept the meaning of life (assessment of one's own past can aid in uncovering/organizing values, give importance to life situations /more, viz Logo therapy V. E. Frankl/), answer very important questions: "What is/was my life like?" "Has my life / did my life have any meaning?" "What meaning?"),
- to maintain identity (concept of own past, comprehension and acceptance of the meaning of life, capability of staking out attainable goals and overcoming obstacles, these can be of help in answering the key question "Who am I?"),
- to maintain (to achieve) life wholesomeness – integrity (coherence, prospects, meaning, identity, are important for acceptance of life as a whole),

- to satisfy specific requirements – in particular those connected to human autonomy:
 - The need to remain in one's intimately known environment, whether physically or in memories (especially of home as a space which I know and control, in which I feel safe and have things which have practical and personal / symbolical importance for me, a space which is full of positive relations with persons close to me). This need can also be projected into reminiscent escape from an aggressive and threatening world that lays emphasis (and demands) on being young, dynamic and capable of action.
 - The necessity to maintain a certain level of activity (to the extent of maintenance of minimal self-reliance up to activities bringing results).
 - The need of communication and maintenance of human relations.

If we examine reminiscences at old age from the aspect of processing (that is from the aspect of their course and influencing factors), and intentionally (for purposes of this text), exclude some co-acting variables (for example, the effects of the external environment, personal specifics of the senior including his (her) value index, etc.), we logically reach the basic factor, which is the state of the memory (relating also to other cognitive functions, because memory is always present in the course of their development and utilisation). The problem is that memory can be encumbered by two methods at a single moment – “normal” involutinal conditional decrease and/or by a greater decrease accompanying a disease, an integral part of which is pathological damage to the brain. This possible state then causes considerable complications in any work within a given target group.

Involutinal conditional decrease of memory generally exists, however, with a different hierarchy and variability. In other words – chronological age has a proven effect on the scale of memory output (within the meaning of its decrease), nonetheless differently in its various types (*viz Comment under the line*) – and moreover – even other determinants must be taken into consideration. Stuart – Hamilton (1999) in relation to this, mentions, for instance, vocabulary, degree of depression, family status, gender, position in employment, education (more *Viz Chapter on prevention*).

Comment under the line – On the Memory

The memory is an entirely heterogeneous capability, whose physiology functions in multiple diverse manners and which issue from anatomically completely different parts of the brain. In line with this, the classification of the types, differentiating the memory, also differs. (Schacter, 2002, Kulišťák, 2003, Grawe, 2007, Hort, Rusina, 2007, Kalvach, 2008, Baddeley, Eysenck, Anderson, 2009):

- *non-associative (independent of association – concerns, for example, so-called habituation, getting accustomed to) and associative (dependent on association of more stimuli – for example, concerns contingent to),*
- *declarative (explicit) and non-declarative (implicit) (divided from the aspect of content and procedural):*
 - *a declarative memory is content-orientated, it concerns what we are able to recall consciously, what we can recollect consciously and what we are able to describe – it has a semantic component (a memory for facts, the meaning of words, its content is not dependent on associations with one's own life), an episodic component (remembrance of events and stories, autobiographic episodes linked to a definite period and space, its content is dependent on vital connections) – memory traces are created in the hippocampus and stored in the cerebral cortex,*
 - *a non-declarative memory is procedural-orientated, it concerns what we spontaneously and unconsciously recollect, what we are unable to describe (it concerns e.g. habituation, priming, perception memory, emotional memory, simple conditional reflexes, motor skills, perceptive and cognitive skills, the learning of habits) – the centrum is in the basal ganglia and cerebellum, the hippocampus is not necessary,*
- *iconic, short-term, long-term – short-term, medium-term, long-term – immediate, working, recent, permanent (subdivided from the aspect of time, but also from other aspects, e.g. according to participation of the cerebral structure, according to the physiological base, etc.),*
- *optical, aural, tactual, gustatory, olfactory ... (divided according to the analyzers), etc.*

As far as other unmentioned parts of the brain are concerned “the parts responsible” for the memory, the main ones are:

- *the temporal lobes which participate in long-term storage of information (the left one stores rather verbal information – Viz also semantic memory – and the right one stores spatial information – Viz also episodic memory),*
- *the front lobes (seat of many functions of intellectual activity) also participate in memory, especially those which are necessary to determine which events occurred recently and conversely those occurring long ago.*

The hierarchy and variability of involuntarily conditional decrease of memory can have the following characteristics (Vágnerová, 2008, Dienstbier, 2009, Gruss, 2009):

- small, but notwithstanding, apparent deterioration of short-term memory (this can concern a decrement of the control of memory processes: e.g. coding requiring attention, recollection of information requiring the capability of reaction

/hus deterioration of attention and of reactive time/ – however, it can be a sign of weakening of memory itself – nonetheless, the age deficit can be tempered by training),

- as far as long-term memory is concerned, it is generally valid that any problems in short-term memory (Viz – Problems in encoding, a necessary precondition for storage and recollection) always appear in it (moreover, all is complicated by the actual state and structural changes of the individual memory regions of the cerebral cortex, by the state of intelligence, language capabilities – e. g. reading level, comprehension of a story, etc) – concretely it can be stated, that (Stuart-Hamilton, 1999):
 - semantic memory for facts (as an integral part of crystalline intelligence relating to the volume of gained knowledge) remains even during aging in a relatively good state (understandable on the assumption that forgetting is an essential integral part of the functioning of memory during one's entire life and on the assumption that normal memory loss at old age just does not exist),
 - implicit memory (in the course of which we are unable to declare remembered capabilities, because we are not aware of them) is to a greater extent not touched by aging, nonetheless individually (proven deterioration occurs only if other psychic activities are necessary for utilisation of implicit information – e. g. association during recollection of collocations),
 - validity of eventual changes of autobiographic memory is problematic – accuracy of memories can be influenced by: personal changing of details (this could occur immediately after the event), personal censoring, the method by which we request the senior to reflect on the past, the frequency of the given activated occurrence, etc. – however, it is possible to concede a certain weakening at old age.

A more serious loss of memory (persons of senior age) is predominantly accompanied by dementia, mostly dementia of the Alzheimer type. In this case the memory has the following characteristics (Kalvach, 2004, Woods, 2006, Hort, Rusina, 2007, Weiner, Lipton, 2009):

- the short-term memory is afflicted at first and more (this means that people are unable to transfer information to the long-term memory, because they do not remember what happened about 30 seconds ago – a consequence is the forgetting of orientation points in a new environment, loss of orientation in time, people, occurrences),
- the capability of remembering (the past) in the long-term memory of already stored information remains over a certain period (Comment: some authors divide long-term memory as recent /retaining information from the recent past/ and

- permanent ((retaining information from the remote past)) – most resistant in our case is the permanent memory – Viz the following sign) (Shiel, Stöppler, 2008),
- The remembering of new contents starts becoming progressively a new problem, ensuing into gradual decomposition of the long-term memory (at first of those which are chronologically closest, e.g. one year old traces, then older ones and still older),
 - a typical symptom can be impairment of the recent episodic word memory (forgetting of usual daily events), also the semantic memory is disrupted in various measure – subsequent problems in expressing (words are missing) are compensated by “word ballast” and lying),
 - on the contrary the implicit memory is retained (again there is validity of the supplement stated for involutional affected implicit memory),
 - the aetiology of the malfunction is important – it depends on e.g. which of the hemispheres is afflicted (e.g. some clients can have more pronounced impaired functions linked to the frontal cerebral lobes and stop being capable of planning and sequencing simple activities) etc.

3 Reminiscences as prevention

In the previous chapter we outlined the significance of reminiscences at old age and marked out briefly an outline of possible involuntarily and pathologically conditioned decrease of memory (as a basic factor of their processional aspect). Now we shall focus on the possibility of utilizing reminiscences as a tool of prevention of the genesis of cognitive deficiencies.

Reminiscences can be prevention both in the broader and narrower meaning of the word. In the broader meaning of the word it has potential to fulfil tasks mentioned in this text in connection with its natural capability of helping: to maintain the sequence of life, to retain life prospects, to shape, comprehend and accept the purpose of life, to maintain one's identity, to maintain integrity and to satisfy specific needs. However, in the narrower meaning of the word it fulfils the task of maintaining activity and maximal possible psychic (mainly cognitive) capacity. Both possibilities can be realized within the framework of institutional care, e.g. specially educational (which naturally is not a precondition, because preventive targets can be achieved even without external professional support).

Comment under the line – Concerning education

It is generally known that education is of great preventive significance against psychic aging and with regard to dementia (Viz e.g. Research of cerebral plasticity D. Hebb, M. Rosenzweig, M. Diamond, E. Bennet et al – Kempermann in Gruss, 2009). It has been proven (Goldberg, 2004), that the same serious neurological disease causes less damage to a well equipped brain than to a brain less equipped. Thus the greatest “hope” is for those regions that have been activated most (e.g. people exerting the brain by creative writing, protect the temporal lobe; people who have been making decisions and planning for a great part of their lives, protect the frontal lobes); various regions can be vulnerable in various measure (Viz – Manifestation of Alzheimer disease). We shall specify the first sentence in more detail. That, which has preventive significance and that, which protects against dementia, is rather closer to activities relating to education, than to education itself.

In institutions realized retention (renewal) of activity and strengthening of psychic performance is (can be) achieved by various methods (it is necessary to note that as far as the mentioned methods are concerned /excluding some which are entirely specific/, there is no distinct difference between prevention and therapy) – within the framework of competencies of a special educator it thus takes place e.g. with the aid of:

- cognitive training (of the memory and with it related psychic functions – perception, attention, thinking, creativity, etc.) – utilizable are: targeted training of the memory and concentration, techniques of characterization and associative chains, creation of stories, knowledge activities of game character (quizzes, crossword puzzles), educational activities (e.g. study of foreign languages), group solution of problems, etc.,
- ensuring of orientation in the reality of the changing environment (in the sense of retention of adaptability to loads, requirements and changes of the external environment) – usable are: practice of skills of utilization of modern technologies (computers, Internet, mobile phones), change of life program (activities), support of intergenerational interaction, etc.
- stimulation of the motor system and strengthening of the physical condition (this has an influence not only on physical health, but also on the psyche ((movement affects the ability of learning including higher attention, better concentration and function of the short-term memory, the positive experience from movement negates some of the inappropriate psychic manifestations, it can change the attitude to oneself, etc.)) – it depends on the type of activity, e.g. some types of dances activate not only the motor centums, but also regions of the brain important for

orientation and perception of space and further centrums linked up to them) – various physical, relaxing and psychophysical exercises are usable.

Eventual decrease of memory can be primarily prevented by memory training. This concerns one of verified tools implemented in the branch of special education gerontagogics (modified according to the client). In order that memory training is successful, certain principles must be upheld in it.

As far as the principles of memory training are concerned we should mention in the first place the necessity of targeted and meaningful work with the short-term memory. The latter is a precondition for retention of information in the long-term memory. Daniel Schacter (2002) comments this in the following way: “any step towards limiting human forgetfulness should attempt to effect control of the occurrences happening at the early moments of creation of a memory trace – it is at this time that the fate of the new memory content is enormously affected by the processes of storage in the memory. All commonly accessible instructions for improvement of the memory know about this fundament and also use it as a base.” The mentioned work with short-term memory can be made more effective with the aid of a change of its acceptance capacity. In particular this can be done by the implementation of various associations or categorizations and transformation of information determined for memorizing. However, other “aids” can be used – for example optical imagination. Among the characteristics of procedures improving conscious encoding into long-term memory should be their simplicity.

A further principle of successful training of the memory is to lay emphasis on activation of attention and concentration. J. Suchá (2008) emphasizes that attention directs psychic activities on, what is to be retained, and with the aid of concentration to be arranged and classified among the others. For this it is important that one must be positively motivated to this activity and staying in a suitable environment. Schacter (2002) mentions that one of the routes blocking conscious storage of information into memory is a malfunction or divided attention, and adds that this can be a major source of errors to which aged persons are prone – aging becomes something similar to a kind of chronically divided attention. Also repetition has its non-substitutable significance in memory training. For transfer to long-term memory in most cases it is necessary to perform several partial returns.

4 Reminiscences as a therapy

In the event that the target is institutionalized realization of support of the senior (through reminiscence) to alleviate (remedy) the consequences of already existing pathological memory decrease, one can speak of implementation of memories (and considerations ensuing from them) for therapeutic purposes.

“Reminiscence therapies” may be represented in a whole line of therapeutic approaches (e. g. live review, theatre of reminiscence). One of the most used and most time-tested approach is reminiscent therapy (Viz Bender, 1999, Woods, 2006, Schweitzer, 2008). It is based on the following assumption. The human brain reacts well to known stimuli, whose traces it has stored in the long-term memory (inasmuch if the given region is not damaged, or with respect to involuntal changes – Viz – the contours of memory stated above). These stimuli can be concurrently excited, reactions to them evaluated and make them a means of understanding among people (in our case between the client and therapist). At the same time it respects personality (some types of personality /or personality features/ are not fully suitable – e. g. persons interpreting their past negatively, regretfully, neurotic persons, not having squared up to their lives – this, however, does not mean their categorical exclusion), and individual experiences of the client, the value, importance and positive experiential aspect of memories.

Reminiscence therapy applies the above-stated assumption purposefully, in a controlled manner, structurally and with the aid of certain specific means (these means are well described by A. Norris, 1986) which are specially adapted media functioning as motives and catalysers of reminiscences (required memory catalysers). It is a case of implementing to a maximal extent various communication channels, in particular, the effective ones. People communicating verbally with difficulty can start communicating by other methods – by means of:

- visual media,
- musical and audio media,
- media, carriers of olfactory or gustatory perceptions,
- touch (tactile) media and others.

An example from the foreign press

Jason Soudah, a professional singer and composer, received an offer from friends in Japan to compose a musical accompaniment to a half-hour video, on which were photographs and scenes pieced together for the purpose of reminding of distant memories. The result could not be doubted. It transpired that music with pictures was more effective in bringing back memories than the picture itself. Soudah (incidentally a former failed student of psychology) commenced further to devote himself to this phenomenon from the position of a composer and interpreter. His work confirmed practically, that music (as a strong communication medium) can “hit” those parts of the brain, which other forms of communication “will not hit” – even the most advanced stages of dementia. Thus a route was offered of how to get over obstacles of Alzheimer disease (Croucher, 2008).

It is possible to work with reminiscences individually, in groups, or during family gatherings, etc. During individual forms of work the individuals are led to positive recollection of their lives (chronologically to align their life activities, events and experiences, evaluate them and create own diaries, memory boxes, briefcases), which can be realized in the course of individual sittings, or during any other activity (e.g. during extra-curricular activities or taking a walk, etc.) – at the same time other specific (therapeutic) approaches can be asserted, e.g. orientation in reality or validating therapy (based on ((according to the traditions of humanistic psychology) on unconditional acceptance of the wishes and notions of the client ((primarily it concerns their positive assessment, non-refusal and possible utilisation))). Groups are formed according to various keys – e.g. open or closed – running at least once a week and including activities during which members (besides others) are encouraged to mutually share their important recollections. In this manner the identity of individuals and continuity of their social life are supported – in the case of involvement of family members, also the quality of family relations and quality of life of family carers.

In the process of reminiscence therapy, techniques based on non-verbal communication (viz possible insufficiencies of verbal expression and in the understanding of verbal communication) have regular representation) – here, for example, this concerns techniques exploiting art mediums: dramatic (simulation of past-life situations, work in simulated space), musical, dancing, creative (communication by drawings or plastic art) and literary – also direct communication by body language, space and time between the therapist and the client, have their own representation. Communication verbally can be only in a measure understandable to the client – the effectiveness of this communication is primarily dependent on the therapist.

The main tasks of reminiscence therapy for seniors handicapped for reasons of pathological decrease of memory (viz Dementia of Alzheimer type) are directed at fortification of their identity and continuity of their own lives (it is essential for them to have also constantly executed activation), partial tasks aim at re-education: of the memory and its related psychic functions (for example, language, understanding, orientation), basic and instrumental skills (self-service, telephoning, manipulation with payment cards), compensation of impairment of behaviour and experiencing, etc.

At the same time it stands that:

- functional assessment of the client must have been executed (be executed),
- we should know the cause of his eventual non-standard behaviour,
- provision of information (assisting in orientation and also in understandable communication) must be pondered over, structured and meaningful,
- cognitive training and activation have their specifics at dementia,
- movement must be motivated from the outside (often considerably specific impulses)

- each memory (even chaotic ones, seemingly without context) have meaning (it could be a last effort to arrange one's own life) and should not be lost,
- autobiographic reminiscence has precedence, but it can be counter-productive to hazardous for an afflicted brain.

Comment – Concerning autobiographic reminiscence

Autobiographic reminiscence is the most natural type of reminiscence in the life of a person (with this type of reminiscence experimented e.g. Galton, Ebbinghaus, Wagenaar). One need not be surprised, after all it is created from absolutely authentic “material”, spiced moreover with own experience. It has many meanings: it can be a sort of reaction to ennui (helping to overcome the discrepancy between prosaic presence and the past charged with events) but also a means of balancing with a life problem (or crisis) (Draaisma, 2009) – and it is in this that lies its therapeutic potential. In a person with Alzheimer type of dementia occurs however breakdown of recent episodic memory (a component of declarative memory), difficulty in seeking words, angst evoked by own lowered functionality, etc. From this ensue several potential problems in utilizing autobiographic episodes from the recent past. In particular, beware of possible traumas from unsuccessful comprehension and recalling – similarly be careful with the opening of memories of traumatic life events (Woods, 2006).

5 Conclusion

It is necessary to emphasize that research in the given region is continually running and that it does not confirm absolutely unambiguously the positive impact of reminiscence therapy at dementia (Thornton, Brotchie, 1987) – especially in the more serious forms. Work with structured groups or individual work with the life story of a client appear effective to a certain extent; reduction of depressiveness has been proved, stimulation and increased interest in activities occurred (Bornat, 1994).

6 Literature

- [1] BADDELEY, A. D., EYSENCK, M.W., ANDERSON, M. *Memory*. New York: Psychology Press, 2009, 451 p. ISBN 18-487-2001-7.
- [2] BENDER, M., BAUCKHAM, P., NORRIS, A. *The therapeutic purposes of reminiscence*. Thousand Oaks, Calif.: Sage Publications, 1999, 300 p. ISBN 08-039-7642-9.
- [3] BORNAT, J. *Reminiscence reviewed: evaluations, achievements, perspectives*. Bristol, PA: Open University Press, 1994, 148 p. ISBN 03-351-9041-3.
- [4] BUTLER, R. The Life Review: An Interpretation of Reminiscence in the Aged. *Psychiatry*. 1963, roč. 26, 65–76.

- [5] BUTLER, R. The life review: An Interpretation of Reminiscence in the Aged. In: NEUGARTEN, B. (Ed.) *Middle Age and Aging*. Chicago, IL: University of Chicago, 1968, 486–497.
- [6] BUTLER, R. The life review: An unrecognized bonanza. *International Journal of Aging and Human Development*. 1980, 12, 1, p. 35–38.
- [7] CROUCHER, M. *Reminiscence Therapy. Memories of the past stirred by dreamy melodies*. The Epoch Times, March 27 – April 2, 2008, B3.
- [8] DIENSTBIER, Z. *Průvodce stárnutím, aneb, Jak ho oddálit*. Vyd. 1. Praha: Radix, 2009, 184 s. ISBN 978-80-86031-88-0.
- [9] DRAAISMA, D. *Proč život ubíhá rychleji, když stárneme: o autobiografické paměti*. Vyd. 1. Praha: Academia, 2009, 302 s. Galileo, sv. 38. ISBN 978-802-0018-069.
- [10] GIBSON, F. *Reminiscence and life story work: a practice guide*. 4th ed. Philadelphia, PA: Jessica Kingsley Pub., 2011, 304 p. ISBN 18-490-5151-8.
- [11] GOLDBERG, E., KOUKOLÍK, F. *Jak nás mozek civilizuje: čelní laloky a řídicí funkce mozku*. 1. vyd. Praha: Karolinum, 2001, 257 s. ISBN 80-246-0713-1.
- [12] GRAWE, K. *Neuropsychoterapie: nové přístupy k terapii na základě poznatků neurovědy*. Vyd. 1. Praha: Portál, 2007, 487 s. ISBN 978-807-3673-116.
- [13] Greying Europe – we need to prepare now – 15/05/2012. In: *Ec.europa.eu* [online]. Brussels: Communication department of the European Commission, 2012, 19.07.2012 [cit. 2012-08-03]. Dostupné z: http://ec.europa.eu/news/economy/120515_cs.htm#top.
- [14] GRUSS P. (Ed.) *Perspektivy stárnutí: z pohledu psychologie celoživotního vývoje*. Vyd. 1. Praha: Portál, 2009, 222 s. ISBN 978-80-7367-605-6.
- [15] ERIKSON, E. H. *Dětství a společnost*. Vyd. 1. Praha: Argo, 2002, 387 s. ISBN 80-720-3380-8.
- [16] ERIKSON, E. H. *Životní cyklus rozšířený a dokončený*. 1. vyd. Praha: Nakladatelství Lidové noviny, 1999, 127 s. ISBN 80-710-6291-X.
- [17] HORT, J., RUSINA, R. *Paměť a její poruchy: paměť z hlediska neurovědního a klinického*. 1. vyd. Praha: Maxdorf, 2007, 422 s. ISBN 978-807-3450-045.
- [18] KALVACH, Z. *Geriatrické syndromy a geriatrický pacient*. Vyd. 1. Praha: Grada, 2008, 336 s. ISBN 978-80-247-2490-4.
- [19] KALVACH, Z. *Geriatric a gerontologie*. 1. vyd. Praha: Grada, 2004, 861 s. ISBN 80-247-0548-6.
- [20] KOUKOLÍK, F. *Mozek a jeho duše*. 3., rozš. a přeprac. vyd. Praha: Galén, 2005. ISBN 978-807-2623-143.
- [21] KULIŠŤÁK, P. *Neuropsychologie*. Vyd. 1. Praha: Portál, 2003, 327 s. ISBN 80-717-8554-7.
- [22] MÜLLER, O. Pohled na speciálněpedagogickou péči o seniory s demencí. *E-Pedagogium*. 2008, roč. 8, č. 2, 54–60. ISSN 1213-7758.
- [23] MÜLLER, O. Speciálněpedagogická gerontogika – výsledek změn paradigmatu speciální pedagogiky. *E-Pedagogium*. 2008, roč. 8, č. 2, 61–68. ISSN 1213-7758.
- [24] NORRIS, A. *Reminiscence with elderly people*. Bicester, Oxon [England]: Winslow Press, 1986. ISBN 08-638-8041-X.
- [25] SHIEL, W. C., STÖPPLER, M. C.. *Webster's new world medical dictionary*. 3rd ed., fully rev. and updated. Hoboken, N. J.: Wiley Pub., 2008, 470 p. ISBN 978-0-470-18928-3.
- [26] SCHACTER, D. L. *The seven sins of memory: how the mind forgets and remembers*. 1st Houghton Mifflin pbk. ed. Boston: Houghton Mifflin, 2002, 206 p. ISBN 978-061-8219-193.
- [27] SCHWEITZER, P., BRUCE, E. *Remembering yesterday, caring today: reminiscence in dementia care: a guide to good practice*. Philadelphia: Jessica Kingsley Publishers, 2008, 224 p. Bradford Dementia Group good practice guides. ISBN 978-1-84310-649-4.
- [28] STUART-HAMILTON, I. *Psychologie stárnutí*. 1. vyd. Praha: Portál, 1999, 319 s. ISBN 80-717-8274-2.
- [29] SUCHÁ, J. *Trénink paměti pro každý věk*. Vyd. 1. Praha: Portál, 2008, 202 s. ISBN 978-807-3674-380.

- [30] SVOBODOVÁ, K. Analýza: Stárnutí populace podle výsledků projekce ČSÚ. In: *Demografie* [online]. Praha: Demografické informační centrum, 2005, 25. 03. 2005 [cit. 2012-08-03]. Dostupné z: http://www.demografie.info/?cz_detail_clanku&artclID=34.
- [31] THORNTON, S., BROTCHE, J. Reminiscence: a critical review of the literature. *British Journal of Clinical Psychology*, 1987, 26, 2, p. 93–111.
- [32] VÁGNEROVÁ, M. *Vývojová psychologie II.: dospělost a stáří*. Vyd. 1. Praha: Karolinum, 2007, 461 s. ISBN 978-80-246-1318-5.
- [33] WEINER, M. F., LIPTON, A. M. *The American Psychiatric Publishing textbook of Alzheimer disease and other dementias*. 1st ed. Washington, DC: American Psychiatric Pub., 2009, 557 p., 11 p. of plates. ISBN 15-856-2278-8.
- [34] WOODS, R. T. *Psychological Problems of Ageing: Assessment, Treatment and Care*. Chichester/ New York: John Wiley a Sons, Ltd., 2006, 352 p. ISBN 0-471-97434-X.

Mgr. Oldřich Müller, Ph.D.
 Ústav speciálněpedagogických studií
 Pedagogická fakulta UP
 Žižkovo nám. 5
 771 40 Olomouc
 Czech Republic
 tel.: +420 777 641 261
 e-mail: omuller@centrum.cz
www.uss.upol.cz