# Journal of Exceptional People

**Institute of Special Education Studies**

Faculty of Education – Palacký University Olomouc

# Content

## BOOK REVIEWS

# Introduction

Dear readers,

we are happy that once again you are reading through our magazine JEP. Our editorial board has included in this number several articles on the life of exceptional people that should attract you not only for their professional level, but could also be interesting and inspiring for you. These articles are divided into two main groups, which are scientific papers and overview essays. In the 7th issue of our magazine you can encounter a problem of special education therapeutic approaches. The first article of Slovak author refers to research of the effectiveness of art therapy interventions and notes the most frequently used research methods of this effectiveness (Z. Yakhyaev). The following Slovak article is also focused on therapy. Z. F. Lucká notes in it not only the importance of psychomotor therapy at an early age of a child with disabilities, but acquaints us with the importance of the first physical contacts between the child and the parents in the first year of its life. On the other hand O. Muller in the next post deals with expressive therapeutic approaches that are applied to gerontopsychiatric users in the Czech Republic.

The possibilities of professional support for teachers who work with clients with multiple disabilities are elaborated in the article by J. Kantor. It touches upon such topics as supervision, Balint group, burnout syndrome. The following text of four Czech authors reports on broadly conceived research concerning the satisfaction or dissatisfaction of users living in sheltered housing (J. Kasáčková, M. Hubištová, Z. Kozáková, G. Smečková).

L. Král and E. Králová in the next post deal with an outline of a causal research of girls with Down syndrome with emphasis on the development and monitoring of their leisure activities – swimming, skiing, dance …

The latest overview essay by Chinese author (L. Shangwei) is focused on the area of special education, as implemented on higher schools in the USA. The author uses

his own experience of staying in the USA and describes special education, degree programs and teacher education for the students with special needs that take place at these schools.

The seventh issue of the Journal of Exceptional People is finished with two readers' invitations – reviews. J. Jičínská encourages us to read the interesting publication Intellectually Gifted Children With Dyslexia, which relates to rather contrasting problem of unilaterally gifted children, the last book review will be no less interesting for the readers, it invites us to the African environment – The what and how of community based rehabilitation (CBR) in the African decade of persons with disabilities reviewed by J. E. Olayi.

The last part of our magazine includes, as usual, information for the authors. We believe that some appears again among you. We wish you nice read.

Pavel Svoboda and Jan Chrastina

# ARTHERAPY IN SYSTEM OF EXPRESSIVE THERAPIES

## (overview essay)

**Zuzana Yakhyaev**

**Abstract:** *This research is aimed at defining art therapy in the system of expressive, artistic therapies in the context of curative education. Based on other researches it focuses on effective factors of creative arts. This research describes individual and social goals, effects, methods and interventions in art therapy. It also describes research in the field of art therapy.*

**Keywords:** *expressive therapies, creative therapies, art therapies curative education*

## 1  Art as therapy

People have expressed their inner world by the means of art since the dawn of time; people express their emotions and desires, relationship to their surroundings and spiritual values. The value of the creative expression for the life of man can be already seen in the cave paintings. Art became part of personality. It allows people to communicate with their surroundings, reveal their emotions, integrate their personality and express their opinions.

Art therapy, music therapy, drama therapy, poetry therapy, dance therapy belong to so called creative arts therapies because they all have roots in arts and theory of creativity. Together with other therapies that use self expression they are also called 'expressive therapies'. Expressive therapies are defined by the use of creative arts, music, drama, dance, motion, creative writing, and playing games, playing in sand (in the context of psychotherapy), consultations, rehabilitation or medicine. If during the treatment different kinds of arts are combined the term expressive therapy is sometimes identified as integrating (Malchiodi, 2014).

According to Malchiodi (2014), the term non-verbal therapies used in the context of art, music, dance and motion therapies, is incorrect. These therapies can be both verbal and non-verbal. In most cases, the cornerstone of therapy is a verbal communication of thoughts and feelings.

Kováčová and Guillaume (2014, p. 87) prefer the term artistic therapies; drama therapy, psychomotor therapy, art therapy, music therapy and bibliotherapy are classified as artistic therapies. According to authors the cornerstone of these is: *"Application of arts in different forms and helping the person whose living is the key to the therapeutic process. The goal of the art therapy is to understand and help client with solving the problem during his life."*

Due to positive effect of the art on the psychological and physical health different kinds of expressive therapies are used by all kinds of experts: psychotherapists, psychiatrists, psychologists, curative and special pedagogues, and others. Art and expressive therapies from the curative pedagogics point of view are explained as an educational-treatment process, which uses different forms of art as a means of treatment and rehabilitation. From this point of view, expressive therapies do not have to be aimed at the problems of the individual person; they can be used as a tool of education, prevention, knowing oneself, and personal growth.

Art therapy is a therapeutic method which uses images to simplify the communication in therapeutic environment (Case, Dalley 1992 In Luzzatto, 2014). It is possible to describe art therapy with targeted usage of visual and creative materials during interventions, consultations, psychotherapy, and rehabilitation. These are used with people of different age categories, families and groups (Malchiodi, 2014).

For its purposes art therapy uses cathartic and therapeutic effect of creative art. Artists were the ones who pointed out that art can be used to heal psychological disorders. During the course of the twentieth century (with the development of psychotherapy), art therapy is being used as a treatment method. It has positive effects on the psyche of a person, and relationships of people. It allows them to regain lost balance.

## 2  Effective factors of art therapy

German author Ingrid Riedel (in Grohol, 2009) identified a few effective means of art therapy. Among them there is the process of creation, process of symbolization, process of conversation, and therapeutic relation.

The process itself has a healing potential, which is based on the concept of sublimation. Creative process of clients is activated during art creation. This process can later be used by the clients during the course of their life outside of therapy to help them build their self-trust and independence. Visual illustration also allows the

problem to be materialized and externalized. The process of work with an artifact allows clients to step away from the problem and thus by this process allows them to verbalize the problem more easily (Grohol, 2009). Art visualization helps people to unite opposites and to overcome dullness (via additional colors, forms, etc.). It can support the process of integration in a significant manner.

In art therapy, during the process of symbolization, it comes to the expression of emotional feelings, inner conflicts, and reflections of relationships to other people. These gain the visual representation by symbols. Often the subject is of an intimate manner, which using symbols can be disclosed; symbols protect clients from direct confrontation. On the other hand, this allows clients to handle expressed matter on the level that is acceptable to them. On an acceptable level, clients are able to contact with their own feelings, their relations to other people, and with feelings of other people. These become easier to process and is a very important support in requested process of mentalization.

Mentalization process is supported by discussion after the art creation process is finished. A group can support discussion and interpretation of art. Competence of clients' self-regulation needed to process discussed matter on acceptable level is respected during the process of discussion. Art therapist is perceptive to the self-regulation of the client. Using questions and one's own interpretations the therapist tries to focus on subjects which both client and therapist are prepared to process.

Process of discussion and interpretation is saturated by empathic atmosphere (which is willing to accept). It is supported by self-description and confession of the client about creation of the art product and of its meaning to the client, as well as by complementary questions, observations, associations, and interpretations of both therapist and group. They both allow overlap with of the process with the life story and problems in it (Grohol, 2009).

Art therapy with the help of the outlined efficient factors could fulfill the goals of resilience, help to discover and strengthen inner sources of clients, and support their auto-sanitation mechanics. In the process of art therapy intervention, it is possible to create sanitation therapeutic relation, which will give the experience of safety to the client and will create the environment for recreating the contact with one-self and with the own inner world of clients.

Thanks to the modern visualization methods, during the course of the last decades the perception of human reactions to the art and its relation to the brain functions have advanced. Researches from the long term perspective point of view are aimed at the relations between art, science, and medicine. Primarily, they focus on systems that take part in perception of the art; systems that take part in processing music and visual arts – the relation between art and emotional reactions (Staricoff, 2004). Lusebrink (2004) described, in a very detailed manner, basic structures and brain functions that are related with the creative experience and level of expression. He

outlined the possibilities of application of that information in the process of art therapy.

Belkofer's and Konopka's research (2008) indicates that measuring electrical activity of the brain using electroencephalogram (EEG) can be a useful and innovative tool for the art therapy research. Participants' brain activity was measured during the research; an hour after they finished drawing. Pair t-tests were used to compare data acquired from EEG both before and after the process of creative art. Results proved that there was a statistically significant difference ($p < 0.05$) between neurobiological activity in the brain during the process of drawing and during the rest. Higher frequency ranges (alpha and beta) showed increased rate. Lower frequency rates (delta and theta) went into decrease. Results of the research outline using art therapy to induce changes or normalize the brain functions, both leading to improvement of the wellbeing of patients.
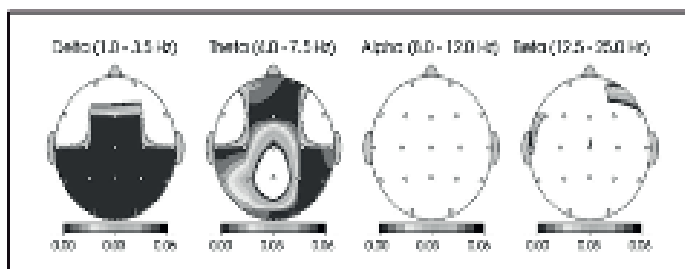


**Figure 1.** FFT Absolute Power Paired t-Test (Belkofer, Konopka, 2008)
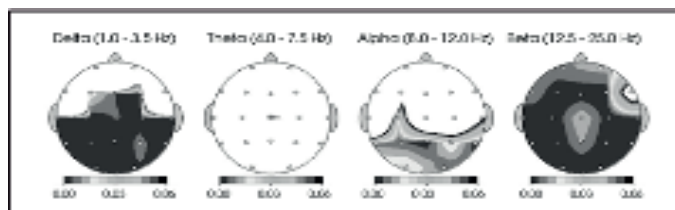


**Figure 2.** FFT Relative Power Paired t-Test (Belkofer, Konopka, 2008)

## 3 Goals and effects of art therapy

The main goal of art therapy is, by the means of artistic media, to therapeutically affect the personality of a person, the inner integrity, provide the contact with social environment and with one-self. Goals of art therapy can be separated into individual

and social goals, and group goals. Individual goals cover goals that are part of a person's individuality. Social and group goals are derived from relation of person to their social environment; they are related to filling their social needs.

| Individual AT goals | Social AT goals |
| --- | --- |
| • express emotions, feelings, conflicts<br>• self-understanding, self-assessment<br>• building confidence, autonomy<br>• developing creativity, imagination<br>• activation, motivation<br>• relaxation etc. | • communication, cooperation<br>• appreciation and support<br>• tolerance, empathy<br>• sharing and problem solving<br>• developing social relationships etc. |

**Figure 3.** Individual and social goals of art therapy (Liebmann, 2005)

Art therapy satisfies the need to be productive and creative by offering space for expression. In the group, art therapy also supports creating relations between clients. Especially during the first phases of group work it may be the means of communication of clients' emotional feelings; art therapy, in this case, is safer for clients and less demanding. Similarly to group therapy, individual art therapy offers safe space and boundaries to relief painful emotions and inner conflicts. Doing so, art therapy provides emotional catharsis, psychological relief, and lowers inner tension. Art therapy can help in solving problems by offering space to clients to settle thoughts and experiences, and at the same time it allows experiments and transformation (Kaplan in Van Lith; Fenner; Schofield, 2010).

In the field of health care, art therapy supports the quality of life, reduces the perception of disease, pain, and physical disorders. It serves as a way to reduce stress, to improve mood, and to increase (or sustain) cognitive functions. Malchiody (2013) pointed at several important researches from the field of medical care which documented and proved the effectiveness of art therapy used while treating different types of diseases.

| Authors | The results of research studies |
|---|---|
| Monti et al., 2006; Nainist et al., 2002; Svensk et al., 2009 | Several studies demonstrated that art therapy enhances the psychosocial treatment of cancer, including decreased symptoms of distress, improved quality of life and perceptions of body image, reduction of pain perception, and general physical and psychological health. |
| Bar-Sel, 2007 | Studies indicated a reduction of depression and fatigue levels in cancer patients on chemotherapy. |
| Gabriel, Bromberg, Vandenbovenkamp, Kornblith & Luzzato, 2011 | Art therapy strengthens positive feelings, alleviates distress, and helps individuals to clarify existential questions for adult bone marrow transplant patients. |
| Rollins, 2005 | Research with children with cancer indicated that engaging in drawing and painting is an effective method for dealing with pain and other disturbing symptoms of illness and treatment. |
| Beebe, Gelfand & Bender, 2010 | Research on art therapy with children with asthma indicated that it reduces anxiety, improves feelings of quality of life, and strengthens self-concept. |
| Levine-Madori, 2009; Elkis-Abuhoff et al., 2008 | Evidence indicated that art therapy and other creative arts therapies stimulate cognitive function in older adults who have dementia or related disorders and may reduce depression in those with Parkinson's disease. |
| Walsh et al., 2007 | Art making may reduce anxiety and stress reactions as measured by cortisol. |

**Figure 4.** The results of selected research studies (Malchiody, 2013)

Staricoff (2004), based on the analysis of more than three hundred references from medical literature (which were concerned with effects of art in medical healthcare), emphasized the crucial meaning of art in this field: causing positive physiological and psychological changes; decreased drugs consumption; shortening span of staying at the hospital; increase in work satisfaction; supporting the relationship between patient and doctor; overall increase of mental health; and development of doctors empathy.

## 4 Art-therapeutic relationship

Genuine, therapeutic and curative educational relationship may help to achieve new inner corrective experience. This can be understood as the main means of treatment. That is the reason why from the art therapists' perspective the approach to clients with relations disorder is the center of attention. It is defined by effort to empathically understand clients and accept them while keeping congruence. During the process of art therapy the latter is expressed by consistently reflecting the needs of clients and reacting to them. Hašto (2006) wrote that personality of therapist helps to process dysfunctional inner models and previous experiences which are connected

to negative emotions. Therapist prompts development of metacognitive level. In this case, empathy, trust, acceptance, congruence, experience of safety, good work connection, corrective experience, holding and containing have therapeutic effect.

According to Grohol (2009, p. 210) therapeutic relationship in art therapy is a soil in which the change is happening, catalysed and registered. Author is concisely comparing it to the playground where the change is happening; although the playground is an independent active factor of therapeutic change. Art-therapeutic relationship is specific due to the presence of a third and very important creative product. Creative product allows particular transmission, which is called lateralized transmission or transmission of sacrificial lamb.

Lateralized transmission in art therapy allows a shift from classic transmission of clients' past conflicts from the therapist to the art material. By this way therapist does not have to act in two different roles. Clients are progressing and becoming more sapient after finding similarity between drawn figure and their own past experience. Regression can be part of the process in which client is emotionally re-living old conflicts and traumas. Real art product keeps clients' perception of reality, allows movement in between of regression and correction (within allowed range). It allows returning back to reality from experience. By this way, act of understanding followed by relief and flickering of pathological symptoms can happen (Slavík, 2003).

Lateralized transmission allowed by art therapy keeps clients' trust in the therapist and a feeling of safety in therapeutic relationship. It is also possible for the healing process not to be dependent on the ability of the therapist to work with verbal transmission.

## 5  Art therapy methods and interventions

Art therapy methods are described and categorized in different ways. The question of its methods is not clearly answerable from this point of view. Clarification of this question is needed for the purpose of practice. Art therapists often work in multidisciplinary teams; it can be expected from them to clearly describe methods and principles of their work, mainly to avoid duplicity in clinical approaches and care.

Luzzatto (2014) held an opinion that it is necessary to distinguish between art therapy method, which is singleton and many possible interventions, which can be arranged in an interdisciplinary team according to the needs of the client. Art therapists should avoid identifying art therapy methods with a single intervention type. For this reason author creates his own classification of art therapy methods using basic classification of Case and Dalley (1992 cited by Luzzato, 2014).

| The image – making process | The use of the image: types of communication | | |
|---|---|---|---|
| | Intrapsychic | Symbolic/interactive | Inter-personal |
| From art materials | A1 | A2 | A3 |
| From external images | B1 | B2 | B3 |
| From inner images | C1 | C2 | C3 |

**Figure 5.** The art therapy grid (Luzzatto, 2014)

Art therapy can be imagined as a grid. On its vertical axis, there is a process of creativity placed, which is realized based on inspiration created by art material, by external image (an item, any other painting, piece of art etc.) or by inner images (projection of inner world, emotions, conflicts etc.). On the horizontal axis, there is an art therapy method for further work with a painting; here it can be communication on inner level or by the means of symbols or via dialogue with another person. For art therapy, this classification is very flexible (AC1-C3); it can react on different client requirements using different types of intervention.

## 6  International art therapy research

Research in art therapy can be separated into three groups; 1. Basic research which builds a theory – theory building research; 2. Practical research; 3. Institutional research. Theory building research is oriented at building of basic theoretical art therapy, seeking answers for creation of building of theoretical pillars of art therapy. Practical research is aimed at finding out effectiveness of different approaches and methods of art therapy that are being used. Institutional research examines different aspects of art therapy as a profession (Deaver, 2002).

Research in art therapy uses both qualitative and quantitative approach; in practice qualitative methods prevail, though. Slayton, D'Archer, & Kaplan (2010) described a research design using analysis of art therapy researches which were carried out during 1999–2007 timespan. They outlined four different types of researches: 1. In-depth and detailed qualitative studies; 2. Single subject pre- and post-test designs; 3. Designs using control and treatment groups without random assignment; 4. Controlled clinical studies with randomized assignment to groups.

Metzl (2008) presented systematic analysis of research methodologies used in an area of art therapy during 1987–2004. Using quantitative research, author identifies eight basic methods of extracting information that is common for art therapy research: clinical case studies, self studies, survey research, interviews, art therapy tests, anthropological research, observation of behavior, and analysis of clients artworks (their percent representation in graph 1). From the available methods the

following were used: ANOVA; quantitative tools (t-test, Chi-square, etc.); correlation (between valuation, pre- / post-tests, and control group); comparison (with other fields, between clients, between tasks, etc.); thematic research; analysis of scores; practical synthesis; content analysis.
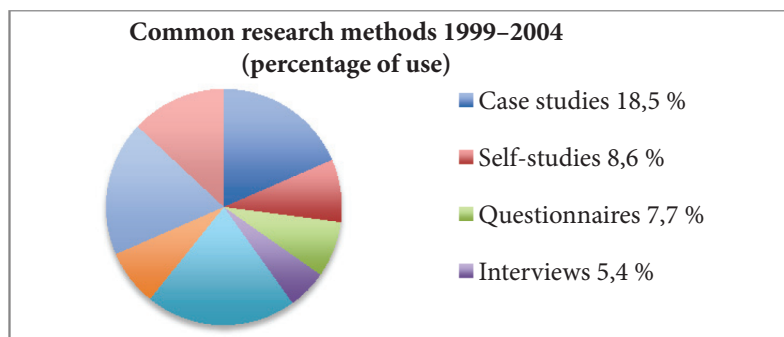


**Figure 6.** Common methodology tools used 1999–2004 (Metzl, 2008)

Deaver (2002) grouped numerous research topics into four areas of art therapy: 1. Therapeutic relation; 2.Valuation; 3. Intervention; 4. Art therapy as a profession. Cathy Malchiodi (2009), an internationally recognized professional in the field of art therapy, pointed at missing sufficient scientific evidence to prove effectiveness of art therapy in different areas of intervention; even though there were many researches made. International art therapy community points out more and more the need of broad researches.

## 7 Conclusion

Creative process by itself has therapeutic potential. In the field of curative pedagogics, it is possible to multiply that potential with further therapeutic-educational processing of experience. In therapy, creative expression can be used as a means that opens the way to one-self and one's surroundings. The basic goal of art therapy is, by the means of art materials, to therapeutically affect personality of person and their internal integrity, to mediate the contact with social environment and with one--self. Therapeutic-educational effect is created by the means of creative process, process of symbolization, process of discussion and interpretation, and therapeutic relation. Foreign researches in the field of art therapy uncover a lot of information about reaction of human brain to art and its relation to brain functions as well as effectiveness of art therapy as a therapeutic method. They also outline many future challenges and clearly indicate the need of researches.

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# PSYCHOMOTOR THERAPY AT EARLY AGE

## (overview essay)

**Zuzana Fábry Lucká**

*Abstract: The paper deals with the possibilities of psychomotor therapy for children in early age. It concerns with the child's family as a very important part of the therapeutic process through psychomotor therapy, from prenatal development of the child until the first years of age. It offers excerpts of research observations from conducted psychomotor therapy interventions with parents.*

*Keywords: child at early age, developmental psychomotor therapy, research in psychomotor therapy*

## 1  Birth of a child with problems in development

Childbirth is an important event for partners or spouses. If a child is born with handicaps or disabilities, it is a completely new situation for the family and a challenge they have never met with before. This situation puts them to a test and certain phases of coping naturally occur. According to Vágnerová (2004), after informing the family, parental identity crisis is common, which is accompanied by mutual accusations of parents. After receiving the information, feelings of inferiority may occur. It takes a longer time for parents without professional accompaniment to overcome these phases. The phases of emotional reactions were described by Říčan and Krejčířová (1997) as shock, denial, grief period, anger, anxiety and guilt stage of balance, and stage of reorganization or realistic attitude. According to Říčan (1990), the birth of a child represents a change in former life of partners or spouses. The arrival of a child with disabilities forces them to form the new roles as parents, often in a different way than they had imagined.

During this period, the provision of intervention or accompanying the family with appropriate form of assistance of therapeutic pedagogue can help rationalize the family situation, focus on strengths, and promote parent – parent, parents – child relationships. The neighbouring countries provide early intervention courses. In our conditions, this form of treatment is still in its infancy. After the birth of a child with a disability or disturbance, parents usually gain necessary information, assistance and support based on their own pro-activity; it is not provided by institutions or professionals. Even in the case of terminated pregnancy, few surgeons address the mental conditions or provide future parent families with information on 'the way forward'. In the health sector in our country, professionals in the medical care often do not explain what the diagnosis means, families are left with medical reports that are hard to understand. The medical care is on a high level, but communication with the families lacks a family orientated language. Parents are not able to become 'partners' in support of the child's development right from the birth of the child. Belgium might be able to serve as an example of good practice. Detraux and Thirion (2010 cited by Pretis, 2010) described that families are immediately informed about possible support through neonatologist, and the family is immediately directed towards early intervention services. According to Klein, Meinertz and Kausen (2009) early intervention is a prerequisite for the success of further therapeutic interventions.

After coping with the situation, it is necessary to define new roles for the parents, and to specify new family needs. Suddenly, the focus should be in addition to the basic functions of the family needs, specific to a new-born child and his or her problem. Goldenberg and Goldenberg (2013, p. 1) identifies specific characteristics and formulates suggestions for these families:
– develop your own rules,
– a number of specific, family roles allocated to each member of the family,
– organizational structure unique to each family,
– typical family forms of communication clear and unapparent,
– create many effective ways to solve common problems in the family.

In addition to the specific functions of families with a child with developmental complications, according Pešová and Šmalík (2006, p. 34) the daily lives of families include these specific tasks:
– securing regular provision of medical, educational and rehabilitation services;
– protection of human beings with disabilities;
– treatment regimen; and
– rapid, effective help in life-threatening situations.

The importance of early intervention is high. If it is possible to start cooperation with prospective parents who are expecting a child with a risk, disruption or impairment in prenatal development, there is a high probability of prevention of secondary damages.

## 2  Developmental psychomotor therapy

Basic theory of psychomotor therapy is generally characterized as a close link between mental and motor skills. This term appeared before the end of the 19th century for the first time, when it indicated the area of psychology that studied perception (Zimmer, 2006). Psychomotor area indicates a pedagogical and a therapeutic concept, which uses the interconnection and influence of mental and motor processes. The aim is to move through a relationship with the client, to positively influence the mental processes and promote the overall development (Zimmer, 2006).

Already from birth, children learn to explore their surroundings through movement. Regarding this fact, it is necessary, especially for children with restricted movement, to convey stimuli so that they can develop on their current developmental level. Szabová (1996) argued that people with disabilities strive for overall improvement of their situation and she suggested applying play to develop undamaged components.

During infancy period, according to Szabová (1999), psychomotor therapy focuses mainly on the socio-motor area, building relationships, improving coordination, improving posture, and motor skills. Our goal in psychomotor therapy was to help clients create relationships to their own bodies, learn to perceive and use their own motion and creative potential to develop life skills.

Szabová (1996, p. 28) argued that psychomotor therapy in Slovakia is defined as *"a therapeutic educational method that through influencing the motor area of expression therapeutically effects mental human activity."* Zimmer and Vahle (2005) showed that in younger children the importance of psychomotor therapy is great, as it is expressed by more of a body language than verbal messages. Nonverbal expression is truer, and more honest. It is possible to strengthen family relationships and make contacts through this form of interaction.

Providing therapeutic intervention is an appropriate form of assistance for the whole family. Depending on what suits the family needs, the therapist performs intervention in the form of mobile services by visits in the family, in their home environment. Müller (2001) set out the objectives of intervention differentiated into three categories, namely:
– considering the needs of clients; removing of internal and external frustrations, conflicts, or stressful factors; relaxation; strengthening the dynamics of personality and group dynamics; strengthening the ability to create meaningful communication, networking 'normal' relations;

– providing services with respect to the orientation and skills of the therapist;
– considering the focus of the institution where the therapy takes place.

In the development of children Zimmer (2005) described important functions that movement fulfils:
– personal function – to move means getting to know the body, getting to know its physical abilities and it develops an image of itself;
– social function – movement allows to do something together with other people, it is a mutual play, it teaches to agree, and adapt to succeed; it is a means of socialization;
– productive function – allows people to move in order to prove something, be constructive, make something out of their bodies, to produce something;
– expressive function – through movement, people can express physically, illustrate, survive and transform feelings;
– impressive feature – movement serves to sense and feel emotions such as joy, happiness, exhaustion, or energy;
– exploratory function – allows movement to uncover and explore the world, and its properties; adapt to the demands of the environment;
– comparative function – movement enables comparisons and competitions with other people; through movement people learn to handle victory and to cope with defeat,
– adaptive function – movement allows people to learn to cope with burdens, to explore their own boundaries, increase efficiency, adapt to their own demands and the requirements of the external environment.

There is space for psychomotor therapy already in intrauterine child development. It is necessary to begin to build a relationship with the child, even though it is not born yet. During this period, it is appropriate to apply various mutual massages for the partner or parents-child, to strengthen their mutual relationship.

### Research observations 1:
*Future parents were instructed to find a comfortable place to hug the partner over the abdomen (as it was comfortable for both partners), and together they gently moved sideways, first slowly, then stronger. They looked at each other, they smelled each other; they were in physical proximity and experienced pleasant feelings. The therapist instructed them to try to observe breathing of each other and to try to align it. The entire exercise took place without words, the partners focused only on each other.*

Mutual awakening of bodily perception establishes a good prognosis for the parent – child relationship after child's birth. Suitable exercises include also various spoken

massages to the pregnant partner, joint dance, or common relaxation with imagination as a preparation for the childbirth.

In the therapeutic work, it is important to use the potential of the family and the young child. It is necessary to promote mutual physical contact and proximity, and the creation of relational links in the family. As Zimmer (2006) stated, movement is an appropriate medium for a child because of several reasons:
– It creates a link between a person and the environment. Movement mirrors in the child's relationship to the environment. It provides examples of how the child may affect the environment and change it.
– It is a playful and physical activity that mediates the situation building, and building relationships of adults and children.
– Children connect movement and play, which allows them to direct expression of emotions.
– Materials, working tools, and physical situation invite children to activity. The boundaries are determined primarily by intrinsic properties of the group material and by a mutual agreement.

Successes and failures are induced by children directly, allowing them to experience themselves as the originators of the processes.

According to Szabová (2010), movement and psychomotor therapy represent the most extensive area of assistance, support, and companionship to children with development with disadvantages, in respect of activation, stimulation, and support. Inspirational psychomotor programs or exercises are focused on finding the best prospects for the child as a subject, involving families in the intervention. Professionals in early intervention support the positive aspects and build on them. They are based on what children know, what they like, strategies that tend never to act violently.

Pešová and Šmalík (2006) argued that having a person with a disability often influences career choice of their siblings or their next family life. Therefore, it is necessary to deal with the support of the sibling relationships. In the context of psychomotor therapy that is incorporated into the activities for siblings of the child at risk.

Szabová (1996) argued that movement is a key condition for healthy child development. For this reason, it is necessary to use movement games and play in early childhood despite the restrictions. An essential requirement is the presence of parents in order to support the relationship. We used basic techniques of psychomotor therapy as motion games adapted to the child's conditions – chase, hide and seek, or play with objects.

*Research observation 2:*
*Parents were instructed to follow a hide and seek game with certain rules. One parent acted as a partner of the child in the game. The other parent used various tools and materials for 'hiding'. A parent with the child turned away, and after the other parent is hidden, together with the child they were looking for him. After finding the parent, the child had the possibility to encounter the material in which the parent was hidden, examine it through all senses – feeling it, observing it, smelling it, and listening to the noise it made.*

The aim of psychomotor therapy in early childhood is to promote posture, movement coordination, eye-hand coordination, perception of one's own body and its limits. After birth, baby massage is suitable, not only for helping digestion but also abdominal pain or other health problems of the child can be prevented. In Slovakia, training courses were implemented to acquire skills of child massages for parents. These courses take place in several centres (e.g.: maserskaskola.sk, unicare.sk, zorka.sk). Within a period of three months, children can be offered simple stimuli in their eye sight (e.g.: a baby crib mobile) that they can observe or utilize in the play with parents in order to strengthen their mutual interactions and relationship. This also supports the function of sensory integration, especially the connection of visual and vestibular systems (Lištiaková, 2011). In the period up to six months, it is important to continue to provide incentives in the play that are placed within children's reach. Play must be accompanied by constant encouragement from the child's reference person. Incentives must be interesting for the child; it is appropriate if some of them make sounds.

It is very important that in learning about temperature, changes are introduced by several sensory channels, e.g.: in the addition to the examination by hands, exploring by mouth may be used. It is suggested that children are presented with objects of different quality, size and shape in order to provide opportunities for the body with diverse perceptions of body temperature. Within a period of nine months, a significant change will happen in the child's life – incentives may be examined in a seated position, they may be rotated to enable exploration by mouth, or different body parts. Experiences with the various features of different objects are provided. It is also useful to offer more than one stimulus, for example clapping on body parts. Children may physically feel the different perceptions of various qualities of incentives, and explore various applications of the object. During this period, music and movement games or body ritual play are also suitable. Parents can play out fairy tales on the child's body, using various materials for stimulation. Kováčová (2008) mentioned the importance of everyday objects used as puppets in play of parents with children. Within a period of one year, play still maintains a great importance in child's development. If in addition to play, psychomotor development of children

is stimulated, it is a natural way for the child, and development can take place. Stimulation should happen within the rituals of daily activities in the child's family.

*Research observation 3:*
*Child is playing with parents lying down in bed. The parent tells a story about a magical forest, where different animals appear: wolves, a deer, a rabbit, a bear, and a fish in the pond. Each animal is re-enacted on the child's body – the wolf slowly crawls and growls, the doe lightly jumps in the woods – on the body of the child, and here and there a hoof stamped, the rabbit easily jumps over all the obstacles, the bear screams loudly and heavily – parent's hands pressed firmly on child's body, and the fish is wet from the water (parent soaks his hand), and when he flees to the woods, it is all wet…*

## 3  Conclusions

We described the possibilities of psychomotor therapy for children at early age in the period of the first year and for their parents during prenatal development. We emphasized the importance of contact, contact with each other, not only verbal, but mainly verbal – through touch, massage, and physical stimulation using music. The importance of early intervention in the period up to one year is very high, because the child needs to be provided with specialized intervention immediately, and the infant with the natural environment.

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# The potential of expressive approaches to gerontopsychiatric users of residential care

## (overview essay)

**Oldřich Müller**

*Abstract:* The article deals with the interim results of experiments performed at the Institute of Special Education Studies, Palacky University in Olomouc. These experiments are primarily focused on the identification and validation of an activation, educational, therapeutic and diagnostic potential of expressive approaches to gerontopsychiatric clients in residential care. Experimental work was ensured by the expert team led by Professor Milan Valenta, assembled in order to meet some current goals and objectives of a specific university research. Specific target group were seniors with early to moderate dementia.

*Keywords:* expressive approaches, senior citizen, atrophic-degenerative dementia, vascular dementia, mobilization, education, therapy, diagnostic tool, diagnostic value, procedural efficiency

## 1  Introduction

Population aging is becoming a major issue. It is therefore striking that it is not adequately been translated into systematic societal preparation for many related consequences. And it is not just about the general quality of life in old age, but also the need for specific solutions to a decent life for each of widely divergent groups within this age group. Its diversity includes both individuals with good health and functional status, and individuals with a strong dependence on care. Among these can be, among others, included the elderly disadvantaged due to diagnosed cognitive disorder, dementia mostly. This syndrome has a different etiology, however, frequent type occurring in the senior population is dementia of the Alzheimer type (50–60% of all dementias), whose prevalence increases exponentially with age (Tokovská, 2014).

The quality of life of persons suffering from any dementia is largely disturbed and requires complicated support measures, spread into several areas of comprehensive rehabilitation care. These measures are also covered by various intervention methods aimed at activating of cognitive functions and maintaining of basic psychosocial abilities of the man (ranks to non-pharmacological approaches of psychological and psychotherapeutic nature). The effectiveness of some of them is more or less confirmed by expert studies (Tavel, 2009) – mentioned as orientation in reality, reminiscence therapy, validation and others. (Holmerová, Rokosová, Suchá, Veleta, 2004).

The approaches, which do not have sufficiently experimental verification of their effectiveness on the target group, include approaches expressively-formative. Their undeniable positive impact is yet demonstrated, eg. for people with mental and behavioral disorders due to psychoactive substances, neurotic disorder, mental retardation and many others (Lištiaková, Müller, Svoboda, Valenta, 2014).

The following text on the above-mentioned fact reacts and tries to describe the results of experiments focused mainly on detecting an activation, educational, therapeutic and diagnostic potential of professionally-led intentional expression in old age psychiatry clientele located in residential facilities providing social and health care. These experiments have been continuous content of specific university research projects undertaken at Palacky University in Olomouc since 2013.

## 2  Expressive approaches for seniors with dementia – theory

Expressive approaches are inherently built to intentionally and deliberately caused artistic expression, which we define as an expression of inner feelings and relationships with people through a specific means of artistic media (art, music, etc.). Jan Slavík (1999) defines expression as a type of human activities (directly related to communication), in which man spontaneously and with an emphasis on the form of expression reflects their inner mental states, impressions, feelings, moods and the associated personal experience or knowledge. In the expressive speech we speak about a lot (mostly about ourselves), but our testimony we cannot always be accurately controlled. Its content is understood rather loosely, but with the emotional impact. Expression can take place at various levels, from little awared expressions accompanying simple emotions to artistic creation.

When applying expressive approaches there always raise two basic options – either an active participant in the use of the media involved in the artistic (or paraartistic) formation, or involved the perception of the results of someone else's creation.

Used medium serves as a means of desirable changes that can, among other things, result from the functional potential of art (Muller, 2014). It has many functions, interacting not only for the natural integration of human personality, but also in their deliberate interference. Jiri Kulka (2008) in this context refers to several areas containing features:

- Biological manifested by stimulation (by stimulating sensory organs and mental and physical processes), relaxation, influencing biorhythms, circulatory system, etc.,
- Psychological operations involving cognitive, expressive, formative, abreactive, emotional motivation, therapeutic, etc.,
- Social affecting human communication, the need for social identification, coordination, social activities and so on.

Functional potential of art has become an important starting point in structuring and comparison of information about the particular importance of artistic expressions (and with them effectively combinable interventional procedures) in non-pharmacological approaches to the elderly with dementia. An illustrative example of such a propaedeutic knowledge may be synergy of music and other arts with music-related factors in spontaneous or intentional exposure to humans. Its undeniable positive effect is based on the proven multi-functional effect of music on different areas of the human brain and its share in the activities of neuronal activity patterns operating in a downturn and determining what people do and experience. Klaus Grawe (2007) to this effect confirms that music activates specific neural systems of reward and emotion (usually responding to measure of the satisfaction of basic needs), and is a major regulator of pleasure. Oliver Sacks (2009), contributes to the neurophysiological knowledge on the topic describing the significance of the musical imagination in the activation of auditory and motor centers of the cerebral cortex and in the production of memory traces (visual, verbal …). The idea of the tune can be a stimulus of procedural motion stereotypes or ex post (eg. after the utilization of unconscious verbal associations) to recall the forgotten text. But it is not just about the text itself. Effects of music can be also connected with remembering and recollecting of general facts, such as the name of the piece or a composer.

Another example of propaedeutic knowledge logically resulting from the functional potential of art relates to its social function and hence the communication. The mere possibility of people to communicate, to process the events of their lives, participate and collaborate on the surrounding events is very important for their personal well-being, an important component and indicator of the quality of life. This option is offered in a specific way by artistic expression. And this is not just

a confrontation between "making" with the social environment, such as the award. It is an absolutely unique opportunity to choose from multiple communication devices the one that fits best, one that allows a person really to communicate something and share something. These means of communication may be in this case features of a different kind, importance and complexity, necessary words (see language as an abstract system of signs and language as its individual use), but the symbolic overlap, giving their users freedom to express (or understand) some of their being.

Nonverbal signs belong to the most frequent (including the cases where no verbal communication skills of participants okay, see, for example, dementia). This is because they allow a safe and relatively easy expression of many problematic and controversial issues. In addition, the requirement for the quality of the relationship and interaction – between the partners, between the expert and his ward, a social worker and a user of social services and so on.

Regarding the importance of nonverbality in caring for seniors with dementia, this is kind of confirmed. Previous researches pursued for example so called touch instrumental (contact from the caregivers), touch expressive (the response of the client), facial expression (as used by the client, or understood by the caregiver), certain diagnostic tools have also been developed (to monitor positive responses by slight gestures, motions , smiles, eye contact, as reactions to external stimuli, music, massage) (Hubbard, Cook, Tester, Downs, 2002). However, research and experimental activities lack the integration of such sub-communication factors in the broader context in which each communication takes place. In particular, it is necessary to focus the attention to the phenomenon of conversation. Ethnometodological access there may be a theoretical and methodological background. The usefulness of ethnometodological principles of conversation analysis to effectively support people with impaired communication skills is highlighted by (along with the usefulness of psycholinguistic modeling used by cognitive neuropsychology) Cséfalvay (Cséfalvay, Brnová, 2009). The findings confirm the experiments by which it was found that elderly people with dementia used nonvrbality not only as a means of communication itself, but also as the interpretation of nonverbal behavior of the others (Hubbard, Cook, Tester, Downs, 2002).

Beyond the given topics in the research of the importance of artistic expression in non-pharmacological approaches we can be inspired by many other findings, especially those related to non-pharmacological approaches to the clientele. We find them in specialized texts by Basting, Killick (2003), Killick, Alan (1999), Gerdner (2000) and others. The important thing is that this knowledge must be constantly correlated with the possibilities of expressivity, and that any modified approaches

always correlate with the rate of involutional (or disease) changes, functional status (self-sufficiency), the adaptability of humans on the age, type of their personality, previous experience, needs. Appointed determinants are also mentioned by the competent authorities. Inspirational is a model by Cohen-Mansfield (2000) built on the relationship of satisfying the needs and the behavior of the individual. Three options are summarized: behaviour leading to the fulfillment of needs (such as search of stimuli), behavior leading to the expression of needs (eg. repeated questioning) behavior resulting from unmet needs (such as aggression caused by pain or unpleasant feeling). The influence of experience on the ability of activity in old age is mentioned by Neda Agah (2006): systematic activities in adulthood are a very important indicator of the success of activities at a later age – old man, who was once very active, will most likely pursue the same lifestyle in the older age.

In determining the effectiveness of expressive-formative interventions in older adults with dementia we can come from primary sources. The empirical study by Jennifer Rusted, Linda Sheppard and Diane Waller (2006) is very inspiring, it is the first controlled study of its kind, whose main purpose was to test whether an active participation in the group working with artistic means (short and long term) has positive impact on psychosocial, cognitive and other functions of representatives of the target group. The authors confirm clear mood changes, improved attention, involvement and participation. Series of studies documenting the positive impact of art on the personal well-being of people with dementia seniors are stated by Elizabeth Lokon, Jennifer M. Kinney and Suzanne Kunkel (2012). Critical review of academic texts (published between 1990 to 2010) on the use of expressive therapies (especially music therapy, art therapy, drama and dance and movement therapy) in supporting people with dementia of the Alzheimer type is submitted by Renée L. Beard (2012).

## 3  Expressive approaches for seniors with dementia – our own experiments

The experiments focused on identifying an activation, educational, therapeutic and diagnostic potential of deliberate, expertly executed expression in old age psychiatry clients in residential care took the form of regular weekly lessons, which were participated by the open group of patients of Psychiatric hospital in Kromeriz, since 2015 the research group has been delegated from service users of the Home for the senior citizens and the Home with special regime Hrubá Voda.

Functional status of these subjects ranged from the fragility to dependency, impaired communication skills correspond to the degree of dementia, when the communication compared with the standard is: 1. partially reduced in the domain

of participation, 2. reduced more in the domain verbality 3. mostly preserved in a nonverbal component (Rousseaux 2010). Other typical symptoms were present, mainly: 1. Global cognitive disorder affecting memory and at least one other function, 2. other accompanying psychopathological non-cognitive symptoms, behavioral and functional changes (Müller, Svoboda, 2015).

Continuous exposure on the experimental group had a form of expressively tuned interventions (combined with elements of the orientation by reality and reminiscence, touch stimulation, validation etc., formally using a group dynamics) made by a pair of therapist – co-therapist whose instrumentation consisted mainly of means which has dramatic and musical art, simple role play (on the level of simulation), physical means of expression, gestures, alternative things, vocal expression, listening to music and so on.

Lessons copied the periodic structure consisting of the following phases:
1. contact, orientation, tuning – aimed to attract and stabilize attention, to detecting and / or influencing mood and general psychophysical state – usually through a small cushion as a contact and initiating object,
2. motivation – leading to activation and focus of activities in a meaningful way – usually with the help of reminiscence media, eg. period music, old photos, reference articles (women's ball bag and gloves, men's hat and bow tie, evoking preparing for an important social event), recollection boxes with tiny props, etc.,
3. thematically oriented group or individual activity – aiming to satisfy some of the actual needs of the participants – it was such as movement and dance activities inspired by music from old Czech films, singing inspired by memories of life's important events, biographies inspired by zodiac signs, etc.,
4. conclusion – leading to the closure of open issues, tuning of memories, feedback summarizing an authentic impression of the executed session, farewell – this was mostly in the form of group conversation and ritual.

The work of the therapist and co-therapist was not only interventions and contact with probands, but also data collection, evaluation, creation and modification of the diagnostic tool and other related activities. Necessary data were provided by participant in observation with the rating record.

Research methodology was qualitative and quantitative. The qualitative part was based on the theory by Strauss, Glaser and Corbin (1999). Research activities were focused on methodological problem – verification of a specific device – but also on the substantive issue – the effectiveness of interventions. Formed and modified specific device (diagnostic tool) was above mentioned rating record (rating scale), originally designed for adult clients with a psychiatric diagnosis (Lištiaková, Müller, Svoboda, Valenta, 2014). Its assessment and adjustment were based on the discovery

of the relationship between sub-headings and the reactions of clients, independently evaluated and correlated by researchers. Items included typical personal-social skills and functional skills but also specific skills related to artistic expression. Their range under consideration was expressed by five point scale. The effectiveness of interventions arose from the observation if there was a significant improvement of the client (and in individual phases) throughout the intervention cycle.

Evaluation rating at that stage did not include the proof of the relationship between all variables, which could be considered (for example dynamics status of probands). Because of the absence of a control group (it was an uncontrolled study) there has not been determined statistical significance of the data collected and the hypothesis confirmed. Simply there was determined the statistical difference between the monitored items at the beginning and end of the experiment and compared in detail with empirical experience. Certain advantage, however, was represented by a structural simplicity and portability (and the possibility of quantifying of quality markers) of the tools. Another positive fact was the comparability over time for a particular client, the possibility to monitor the progress and the possibility of recording the central tendency of the monitored identification marks (ie. persistence, decrease or increase).

Diagnostic tool reached in the described phase of the experiment the final format and content (Muller, 2015).

### *The evaluation rating of expressive techniques in elderly patients with dementia*

1. The status of a client in the group

| *I.* | *II.* | *III.* | *IV.* | *V.* |
|---|---|---|---|---|
| *Does not cooperate with the others* | *Cooperates with the others rarely* | *Cooperates with the others sometimes* | *Cooperates with the others often* | *Cooperates with the others always* |

2. The activity of the client

| *I.* | *II.* | *III.* | *IV.* | *V.* |
|---|---|---|---|---|
| *Indiference (detachment)* | *Mostly passive* | *Middle, ambivalence* | *High activity* | *Leading activity* |

## 3. Spontaneity

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Rigidity* | *Low spontaneity* | *Middle, ambivalence* | *High level of spontaneity* | *Maximal spontaneity* |

## 4. Focusing

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Permanent absent-mindedness* | *Often absent-mindedness* | *Middle* | *Stabile during main part of intervention* | *Stabile during the whole intervention* |

## 5. Emocional expression

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *None* | *Low* | *Adequate to the situation* | *Exaggerated* | *Endangering* |

## 6. The emocionality of a client

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Generally not active and refuses* | *Very shallow uncovering* | *Uncovering on a personal level* | *Uncovering on an emotional level with the appropriate context* | *Uncovering emotional and of affective nature, its expression outwardly* |

## 7. Nonverbality

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Without expression or inadequate to the situation* | *Low level* | *Middle* | *Adequate in some activities* | *Adequate in situations during the whole intervention* |

8. Interaction

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Indifference* | *Low level of the reaction* | *Ambivalence* | *Predominant conscious reactions to the group members* | *Conscious reaction to the members of the group for the whole intervention* |

9. The reaction to the initiation item

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Indifference* | *Low level of the reaction* | *Ambivalence* | *Predominant conscious reactions* | *Conscious reaction for the whole intervention* |

10. The reaction to the dramatherapeutic medium

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Touch* | *Music* | *Noise* | *Image* | *Word* |

11. Dramatherapeutic expression on the level

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Movement* | *Noise* | *Image* | *Figure* | *Verbalization* |

12. Entering the role and its level

| I. | II. | III. | IV. | V. |
|---|---|---|---|---|
| *Inability to enter the role* | *Simulation, without interaction* | *Middle, occasional falling out of role* | *Maintaining the role with interaction* | *Interactive characterisation* |

Said diagnostic tool was first developed by a modification of the rating scale under the earlier experimental work with adult clients with a psychiatric diagnosis (in one group there were mostly women of working age with neurotic disorders and the second group was for men and women addicted to alcohol and non-alcohol drugs), and certain items unsuitable for our target group of older people with dementia were eliminated – eg. items detecting abilities of imagination and distance (for their supposed small usability). It was based on the fact that these items unnecessarily target

impaired abilities that are in normal contact rather an obstacle to communication and consequently a source of potential conflicts between users of social services and professional (social) worker.

Subsequent verification of the modified measuring device based on the correlation of the monitored sub-items, namely expressive interventions and responses of probands showed during the intervention cycle some significant differences. Items such as emotionality of a client (+ emotional expression) nonverbality, reaction to the initiation object and response to dramatherapy medium proved to be more correlated.

The category Emotionality of a client (+ emotional expression) seemed to be very crucial factor even before proving of the relationship between variables. Experience shows that emotions are an important means of expression, interaction and establishing closer relations right for the people with dementia. They replace their impaired verbal component of communication (especially so called expressive and receptive language, it means the ability to encode and decode thoughts). Assessing emotional responses of probands then actually showed a high correlation. However, it should be emphasized that the share of influencing factors was not further investigated. The current dynamics of emotions was, in our opinion, increasingly dependent on the emotional support and set atmosphere, a great role was played by the character of the personality and the way of experiencing the emotions influenced by cognitive impairment (ranging from sheer apathy, instability, to inadequate emotional reactions).

The category Nonverbality is closely linked to emotion, because they are mutually interconnected mental functions. Any emotion causes nonverbal response, and vice versa, nonverbal expression evokes the experience. To persons with dementia it allows an easier way to communicate and interpret the behavior of people around them (through understanding gestures referring to the emotional condition of the person), and plays an important role in assessing their behavior from the point of the view of caregivers. Even this category showed a significant correlation. It is highly probable that it is better evaluated due to the existence of experience in used non-verbal signals, which can be structurally tracked among clients – there may be mentioned lifting the head, smile, nod, eye contact, hand movement, reaction to the initiation touch and so on.

Categories Response to the initiator object is related, inter alia, with the initial touch (understood within the meaning of haptic non-verbal communication). This object is intended to facilitate communication between the communication partners, mostly in the initial motivation phase. Its appearance is therefore of a rather neutral

character that do not cause any a priori needlessly confusing associations. It should be a simple object, pleasant to the touch, not burdening the visual perception (a small cushion proved to be good). The response to the initiation object showed high correlation values, in addition it was possible to trace a degree of participation in the communication of individuals (see also below, item Interaction), a factor that has the potential for future research of conversation capabilities. In addition to monitoring the level of responses there have been observed, for example, phenomena such as physical proximity (or physical contact) to the communication partner, his address, the degree of externalization of feelings caused by initiating object and focus on the communication partner (ie: Does a person use the object only to themselves?), etc.

While the previous categories included in the human resources and social competencies, responding to dramatherapy falls between specific competencies associated mainly with artistic expression. There is its uniqueness. Dramatherapy media reported the ability to compensate many shortcomings associated with cognitive impairment – see some examples in the theoretical part of the text. In our experiment the finding was confirmed that the majority of clients with dementia positively responds to the touch and music (or selected sounds), then more uneasily to the image, and most uneasily to the word. This statement was also supported by the high validity of this item. For future research in this direction it seems to be beneficial to correlate the media with its reminiscent potential. We proceed from the following findings. The reaction of probands to the media could be relatively accurately assessed, but their reactibility revealed something extra – opening and accessing memory traces, although with varying intensity and variability. Yet it was evident that the significant role was played by a currently running particular reminiscence of one of the clients. As a confirmed we consider also a fact of the long-term positive impact of these media on the functional status of people with dementia and their preventive effect against the risk of sensory deprivation.

Such items like position in the group, interaction, activity, spontaneity, concentration, dramatherapy expression and access to role proved less correlated. The common denominator of the categories covered in the personal-social competences, and also the leitmotif of their lower correlation was ongoing disruption in the domains of participation in communication and verbal communication, obviously there was an impact when other capabilities were disturbed. In the category of position in the group there were partially exhibited also some positive effects – a mutual emotional support and cohesion of the group members, the transfer of similar experiences and problems, or the perception and assessment of the behavior of another person with possible self-reflection. Category interaction convincingly correlates with response to the initiation object. Activity and spontaneity were generally subdued with clients. Ability to concentrate is difficult to evaluate because of the present deficits in selective

attention, some probands manifested inertia (inertia given by both their own disorder and in some cases inappropriate medication), others perseverance (insistence, eg. on personal issues). In the longer term, however, some of the clients showed some improvement.

Among the less correlated specific competences related mainly to the artistic expressiveness belonged dramatherapy expression at the level of movement, sound, image, character, verbalization and entering a role. It was certainly influenced, inter alia, by impaired ability of activity, spontaneity and concentration, they were also more difficult to evaluate. Its importance proved the positive appraisal of activities of clients – albeit rather sporadic – induced experiences had an impact on their eventual courage to use this medium in the future. We believe that the positive appreciation had the effect of recording the experience of the proband into their procedural memory. Rating of the category entering a role showed a strong correlation, both of the above reasons, and also because this phenomenon has not been devoted significant space. The highest levels of the role that we used was the simulation (eg. dance at the ball). We assume that if it worked systematically, for example in the form of theater, we could take advantage of the higher levels. This was not our concern. Observing, however, we came to the following conclusion: for the person with dementia role play may have some importance when it retains a sense of control over their own lives, and if it is based on their identity, status, and current social roles.

## 4 Summary

The result of the research activity focused on methodological problem was the above mentioned diagnostic tool. In further consideration of its validity there will be taken into account the degree of correlation of individual items, which will be likely reflected in the rating, integrating only those items with high or higher correspondences.

In the case of the concept of investigation as a substantive issue (effectiveness of interventions) a verified tool showed statistically significant shift in the scale of the clients evaluated on early intervention and at the end of intervention, namely with items focused on concentration, emotionality and emotional expression, response to the initiation object, response to the dramatherapy and nonverbality. It should be noted that due to the large number of independent variables affecting the "improvement" of the client in items mentioned in time and the absence of a control group we admit to that discovery relatively little predictive value, with minimal generalization.

Other results of the experiments were completed processing and verification of methodical series, respecting the specific needs of the target group. Into their methodologies were incorporated as well:

- narrative approach to the use of reminiscence – using free group conversation about the life experiences of participants,
- reflecting (balance) approach to the use (and survey) of reminiscence – using a rating of the life of clients, encouraging, supplying the meaning of life,
- information access – based on the transmission of information (memories, experiences, knowledge) in the form of a personal narrative in the context of historical events (Muller, 2014).

All of these concepts have become part of expressive interventions potentially useful in non-pharmacological approaches to the elderly with dementia in residential social care.

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# Benefits and difficulties in educating of pupils with severe multiple disability and possibilities of professional support of their teachers

## (scientific study)

**Jiří Kantor**

*Abstract: Educating of pupils with severe multiple disability brings specific benefits as well as difficulties for the teachers. These pupils are educated mainly in special schools in the Czech Republic and the classes often consist of several pupils with severe functional disability at once. The paper presents the outcomes of a qualitative study of this issue in Czech schools. The qualitative design was chosen because of the lack of theoretical background in this area of education. The sample consisted of 45 teachers and 4 students with severe physical, intellectual and communication disability. The main method of data collection included semi-structured interviews with teachers and observations of the educational process. Open coding and categorisation were used for data analysis. The outcomes of the study are discussed in the context of professional support provided to teachers. Various models of teacher support are discussed. Moreover, an association with the burnout syndrome is outlined. A scheme for further research is based on quantitative methodology.*

*Keywords: Multiple disability, education, supervision, Balint groups, burnout*

## 1  Introduction

The pressure exerted on teachers who educate pupils with severe multiple disability is determined by a number of specific factors. Teachers who educate intact pupils do not encounter these factors at all or to a limited extent. This situation is caused by the specifics of the educational process, personality characteristics of pupils with severe multiple disability as well as the educators. Up to date, professional literature has paid minimum attention to this issue and there are no available domestic studies. Similarly, contemporary foreign literature lacks conclusions that could be transferable

to the Czech educational environment. One of the reasons is the difference between the educational systems in the Czech Republic and in other countries (particularly those in Western Europe). The popular inclusion trend allows more and more pupils to study in mainstream education, while special schools have fewer pupils with special educational needs. This also applies to pupils with severe multiple disability (Downing, 2008). Research in the area of special schools is of marginal importance as a result of the social situation in these countries, while considerable attention is paid to inclusive education.

On the other hand, the Czech Republic is one of the countries with a significant proportion of special education, as documented by current statistical data (Michalík, 2015). For pupils with severe multiple disability, attending a special school during compulsory school attendance is virtually the only educational opportunity. Some classes that follow an educational programme of a special primary school have most, or all, pupils with severe multiple disability. If these pupils enrol in school, the staff educating these pupils should be stable from a long-term perspective, so that the pupils need not repeatedly undergo the difficult adaptation to new teachers after a short period of time, etc. For the headteachers this is a challenging task, which requires the development of appropriate conditions for the teachers and teacher assistants, so that the factors supporting excessive staff fluctuation in these classes can be minimized. What are some of the difficulties that teachers encounter in educating of pupils with severe multiple disability and which strategies effectively help them overcome these difficulties?

This paper presents selected conclusions of a domestic quality-based study, which mapped the education of pupils with severe multiple disability. The paper will consider conclusions that have not been published so far and that relate to personal teachers' benefits, difficulties and coping with these difficulties in the education of pupils with multiple disability. The conclusions of this study will be also related to the issue of the burnout syndrome and professional teacher support because these topics provide enough material for the development of the required theoretical background and theoretical framework for discussion.

## 2  Overview of significant studies and conclusions in professional literature

The overview of research studies and conclusions in professional literature, which will be further used for the development of theoretical background, is divided into the areas of pressure exerted on teachers and the burnout syndrome, and possibilities of professional support of teachers.

## 2.1 Pressure in educational practices

To describe the effect of pressure on teachers it would be very helpful to develop a multidimensional model describing the three aspects of burnout as suggested by Maslach and Jackson (Maslach, Goldberg, 1998). This model was widely used in researching the burnout syndrome in teachers, and the Maslach Burnout Inventory is still the most used and reliable diagnostic instrument. Another diagnostic tool of the Burnout Measure was developed by Pines, Aronson and Kafry. These and other diagnostic tools played a significant role in a number of research studies of pressure exerted on teachers because they are suitable for identifying a number of factors related to the burnout syndrome.

Kallwass (2007, pp. 9) defines burnout as a "state of extreme exhaustion, internal distance, considerable performance drop and various psychosomatic difficulties". Research of teachers revealed a number of stressful aspects of this profession. An important fact is that teachers most endangered by the development of the burnout syndrome are those who have done their work with vigour, enthusiasm and for a long time. "*Stress factors in the life of a teacher include the atmosphere in the teaching staff, competence of leading employees, insufficient rest time, relaxation value of breaks, isolation, missing supervision*" (Hagemann, 2012, pp. 11).

**The causes of pressure exerted on teachers and the burnout syndrome** were summarized e.g. by Švingalová (2006), who speaks of institutional causes, wider social causes, psychical and physical causes and about insufficient professional teacher training. The results of a research study performed in 2007 showed that most stressful factors identified by primary and secondary school teachers were fatigue and long-term unbearableness (Hodačová et al., 2007). Another research study focusing on female secondary school teachers conducted in 2005 in the Czech Republic confirmed that the risk of the burnout syndrome increased with age. However, the prevalence of the burnout syndrome does not directly correspond with the length of teaching experience (Mičkerová, Burešová, 2006).

According to Vymětal (2003), the burnout syndrome occurs primarily in professions based on interpersonal communication as this easily causes an imbalance between the emotional sides of receiving and giving, and gradually both psychical and physical reserves might be depleted. Pupils with severe multiple disability are among the groups that strongly predispose teachers to such imbalance because educating of these pupils is strongly associated with providing for their physical, psychical and social needs (Ludíková et al. 2014).

To understand the causes of the development of the burnout syndrome in teachers of pupils with severe multiple disability, one should consider the paradoxes of professional conduct as described by Kopřiva (1997). These are situations in which

teachers place impossible demands on themselves. Specific paradoxes identified by the author include the right to "have understanding for every pupil", right to "not need the pupil's positive response" and giving preference to being helpful to the detriment of insufficient evaluation of own work. Especially the first two rights are very important for teachers of pupils with severe multiple disability, while the third right could be reformulated as an ability to recognize own boundaries and possibilities of providing care to pupils.

Kantor (in Kantor, Jurkovičová, 2013) summarizes some issues of working with pupils with severe multiple disability that present certain risk areas in the process of long-term relationship development. These include dedication to the pupils or work, inability to encounter the pupils' misery on a daily basis, inability to recognize situations of inappropriate saturation of own emotional needs in the teacher-pupil interaction, inability to recognize appropriate boundaries with respect to the pupil and the pupil's family and particularly power behaviour with the pupil.

Another significant area is the relationship between the burnout syndrome and motivation to select the teaching profession. Research studies revealed two principal reasons for selecting this profession: secure employment and perception of this profession as a mission, which acts as a protective factor against the development of the burnout syndrome (Vercambre, 2009). A Swedish study (Norlund 2010) suggested similar results. It was revealed that the burnout syndrome was associated with insecure employment, risk of losing employment and an insufficient number of employment opportunities. It could be concluded that idealism in teachers might be a protective factor (in teaching pupils with severe multiple disability a degree of idealism is even required). However, it should be noted that an excessive difference between ideals and reality acts rather as a risk factor. In teaching pupils with severe multiple disability this requires e.g. an ability to assess real educational possibilities of a pupil and other practical skills.

The burnout syndrome is traditionally described as a relatively uniform unity in all individuals suffering the burnout syndrome with consistent etiology and symptoms. However, clinical and therapeutic experience does not support this approach, and there is a need to describe in detail various types of the burnout syndrome and then adapt therapeutic interventions to increase their effectiveness. For example Farber suggested a preliminary typology of three syndrome profiles: frenetic, underchallenged and worn-out, where the main classification criterion is the degree of enthusiasm for work. Farber's theoretical model was developed according to clinical observations of teachers and in-depth interviews with 60 psychotherapists (psychiatrists, psychologists and social workers with various degrees of experience, from the public as well as private sector) (Montero-Marin, 2009).

A French research study investigated personality factors in order to determine why individuals who work in identical working environments and have identical

education and experience react to pressure in various ways. This is surely influenced by neuroticism, which to a large extent affects how an individual reacts to mental distress, and which is associated with a higher degree of emotional exhaustion. Other research studies emphasised the sense of effectiveness, perception of superiority and inability to adapt (Vercambre, 2009).

A significant part of the issue of the burnout syndrome is **prevention and coping with pressure factors** in teachers. An interesting perspective of this area was presented by Hagemann (2012). The author divides prevention into guidance for the teacher, educational system and school management. As far as organizational factors are concerned, recent research studies suggested that conflicts and doubts in competences, imbalance between effort and reward and perception of occupational stress were significant factors of the burnout syndrome in teachers. Specifically, the number of pupils, time limitation, and work-related pressure were associated with a high degree of emotional exhaustion. Disrupting the class climate also influences stress and subsequent burnout; the school climate factor appears crucial in terms of coping with pressure by teachers.

## 2.2 Professional support of teachers

The issue of pressure prevention is associated with professional support provided to teachers. In the areas of social care and health care there is an official system of providing support to helping professions. The educational system does not have these possibilities for the time being although it seems that this could be a significant means of improving the quality of education, psychosocial support of teachers and delaying of burnout symptoms.

The support provided to health care professionals is primarily based on a sophisticated and implemented system of employee **supervision**. Fowler (1996, pp. 472) defines supervision as "a formal process of professional support and learning, which allows practising individuals to develop their knowledge and competences, assume responsibility for their practice and promote client protection and safety of care provided in a clinical situation". The objective of supervision is to ensure that pupil interventions are implemented correctly and that ethical rules are observed. Another aim is to support professional as well as personality development of helping professionals and to prevent the burnout syndrome. In some cases it also fulfils the administrative function – helps professionals meet the expectations of their institutions and their responsibility for quality work.

Clinical supervision can only be performed by persons with supervision training. At present, the term supervision is used in many areas, which do not specify precise

requirements for professional education of the supervisor. This situation is relatively common in the system of education.

Aldridge (in Kantor, Lipský, Weber et al., 2009), Forinash (2004) and other authors provide a broad definition of supervision by means of several models, which differ in functions and role hierarchies between the supervisor and the person supervised. The following concepts can be distinguished: intervision, clinical supervision, mentoring, research supervision, testing for certification claims and counselling. However, these forms significantly differ in terms of roles, responsibilities, relationship hierarchy, etc.

Another form of professional support provided to teachers includes support and Balint groups. The purpose of these groups is to provide psychological support to employees. No scheme is defined for **support groups**. They can be organized by the participants themselves or can have a preselected leader. They can be open or closed (with variable or stable number of participants), short-term or long-term (lasting over several meetings to months, in exceptional cases even years), structured or non-structured (with free course), with a clearly defined objective and purpose of origin or providing general support in a wide context.

**The Balint group** is a sort of support group, which has several schemes in our conditions. The Balint group is named after M. Balint, a Hungarian physician and psychoanalyst, who started to organize supervision seminars for general practitioners in 1950s in London (Ricaud, 2002). These seminars focused on the psychological and relationship issues of working with a patient in order to help physicians understand the relationships and attitudes to their patients that are considered problematic for some reason. Vymětal (2003) describes the scheme of the Balint group in five stages – exposition, questions, fantasy, practical suggestions and protagonist statement.

Kutter (2002) mentions the following special features of Balint groups: group atmosphere, protagonists' contributions, listening and reactions of group members and mirroring of transmission and counter-transmission relationships of the protagonist in the participants' reactions. The Balint groups are professionally organized by individual national Balint societies. In our country there is no independent association, but several experts of helping professions are members of the International Balint Federation, which groups national associations (Salinsky, 2002).

Supervision, intervision, support groups and Balint groups are strategies that proved to be effective inproviding system support to employees in helping professions. Apart from these, there are naturally many other effective strategies, which are used e.g. on a personal level. One of the bases of the study presented below is an assumption that teachers of pupils with severe multiple disability prefer strategies provided on a personal level to strategies of a system-based teacher support.

## 3  Research methodology

The conclusions presented in this paper are based on an extensive study mapping the education of pupils with severe multiple disability. The study was of a predominantly quality-based type (embedded theory methodology) with a questionnaire survey followed by statistical processing. The methodology of the whole study was described in detail in other texts (Kantor, 2013).

In this study we performed semi-structured interviews with 45 teachers and observation of the educational process of four pupils. The interviews and observations brought data concerning the topic presented in this paper because:

- The semi-structured interviews contained an area in which the teachers reflected on the difficulties that they encounter in educating of pupils with severe multiple disability, coping strategies and possibilities of effective professional support. Moreover, they also commented on personal benefits they gain in educating these pupils.
- Observation of the teacher-pupil interaction during the educational process brought a closer understanding of educational reality and a possibility of comparing the data collected by means of these two data collection methods.

The results of this part of the study will be divided and presented in three areas, which also represent the objectives:

- To identify teachers' personal benefits gained through educating pupils with severe multiple disability.
- To identify the difficulties that teachers encounter in educating of these pupils.
- To identify the strategies that help teachers resolve these difficulties, including effective professional support strategies.

The sample of teachers for quality-based interviews was developed by means of purpose selection using the contacts acquired from special education centres. The following criteria were used to develop the sample of teachers:

- The teachers are required to have a degree in special education, Bachelor's degree as a minimum.
- The teachers are required to have at least two-year experience in teaching pupils with severe multiple disability in order to have sufficient experience to be able to identify examples of good practice.
- The teachers need to be willing to give an interview and must be able to reflect on own work (in some cases this requirement was met partially because the ability of self-reflection was very diverse).
- In the selection of schools, well-accessible schools will be preferred (the quality-based part of the above mentioned research study did not include schools from

Western and Northern Bohemia because it was difficult to establish contacts with these schools).

The following criteria were used to select the sample of pupils:
- The pupils have serious limitations in movement, communication and mental functions (at a level of severe or deep mental retardation).
- To achieve data variety, we selected a single pupil from one educational institution.

The final sample included 38 teachers (two interviews were rejected in the process of transcribing data material into written form due to low data efficiency) and 4 pupils.

The interviews were recorded by means of a voice recorder and then transcribed into a written form applying a first order reduction. This data material was prepared for a quality analysis. Pupil observations were recorded by a combination of several methods – video recording of individual pupil education on the one hand and a combination of voice recording and own notes of the researcher on the other hand. These data were also transcribed into a written form, subjected to a first order reduction and prepared for a quality analysis.

Data analysis was performed by means of open coding, during which the basic categories and subcategories were identified. The results of this part of embedded theory methodological procedure will be presented in the following chapter. Throughout the whole research we also performed an axial and selective coding analysis. The discussion section presents some final theory conclusions in order to evaluate the data on the topic of the study in wider theoretical contexts.

## 4  Data analysis

Data analysis will be divided according to the objectives of the study, i.e. the three areas mapping personal benefits of teachers, difficulties experienced by teachers and relevant coping strategies. The overviews of individual categories relating to each area will include a list of statements in each category corresponding to the number of teachers who gave their response. The quality of the categories in each area will be demonstrated by means of teachers' statements.

**The first area** mapped the teachers' personal benefits gained through educating pupils with severe multiple disability. The results of the categorization process are shown in Figure 1.

| Category: | Presence: |
| --- | --- |
| Pupils' reactions | 20 |
| The teacher can learn a lot | 18 |
| Any progress of the pupil | 9 |
| Creativity and playfulness | 5 |
| Interest in the pupil's personality | 4 |
| Humour in working with the pupils | 3 |
| The teacher feels good among the pupils | 3 |
| Team cooperation | 2 |
| Patience and humility | 2 |
| Parents' reactions | 1 |
| Others | 11 |

**Figure 1.** Personal benefits of teachers

The highest number of statements in this area related to *Pupils' reactions* that motivate teachers to work. The statements related to the following pupils' emotional reactions: pupil's joy (16), pupils give the teacher energy (2), pupil's satisfaction (1), positive pupil's reactions in general (1), and naturalness of pupil's reactions (1).

An analysis of observations also revealed that emotional satisfaction of a pupil was the primary objective of the teacher, especially in case of individual teaching. An analysis of two video recordings (music therapy and basal stimulation) showed that in the first place, the teachers tried to achieve positive emotional reactions in their pupils. These reactions could be compared to a certain bridge for initiation of mutual interaction, on which the teachers bases further work with the pupil. However, emotional reactions were very significant during all observations. If a pupil started to react in an unsteady, tearful, or anxious way, etc., first the teachers treated the emotional state of the pupil, only after that they continued teaching.

Inducing a smile of pupils with multiple disability might represent a significant motivating factor for some teachers in the process of selecting this particular job, as illustrated by the following statement: "…there's something about this job that enchanted me, I wouldn't leave now. When I came to look around before started I went down the corridor and one of the girls gave me a smile. She did it in a way that made me want to stay and work here. That was my beginning."

In the category *The teacher can learn a lot* many teachers left this category without specific examples (due to its extent). Specific examples of what teachers can learn

are documented by the following statement: "I like exploring the things that can get us in contact with the children. Finding out about their needs is very interesting in itself… It also makes me think about what I need in the contact and whose needs, the child's or mine, matters."

*Visible progress* in pupils with severe multiple disability is often a subject to long-term work which can last for several months to years. A statement made by one teacher is a good example of how rewarding a pupil's reaction might be after the teacher's long-term effort (although she spoke about a pupil whose functional abilities exceed the criteria for pupil selection indicated in Chapter 3): "This is a lot of hard work but that's what brings a lot of joy. Here I'm filled with something indescribable. I have a boy here, we've been practising a poem since September and he speaks only a little, and all of a sudden last week he just said the poem. Tears ran down my face as I was shocked."

In the category *Interest in the pupil's personality* the teachers said they were fascinated by "a large scale of various expressions" of the pupils, by how the pupils "cross their boundaries" and also that the pupils "are themselves, have distinct personalities, if they don't want to do something, they simply won't." These statements could be probably interpreted as a low degree of the pupils' adaptability. However, in the assessment of this behaviour there is a noticeable relationship of the teachers towards their pupils, which has a strong support function in developing a positive picture of the pupils' personalities.

The topic *Humour in working with the pupils* was described in a different paper (Kantor, Urbanovská, 2014). The category *The teacher feels good among the pupils* related to authenticity, spontaneity and other positive qualities of the pupils, as evidenced by further data acquired during interviews.

The category *Others* included statements about feelings of work satisfaction, overcoming the pupils' difficulties when a teacher has an own class after a long time, situations when work increases the feeling of own value on the part of the teacher, when the teacher enjoys supporting the pupil's family, when work has a meaning, freedom of approaching the pupil, which the teacher has in this educational programme, the fact that the class is a family, the fact that the teacher is aware of being happy because his/her own children are healthy, and the feeling that the pupils need the teacher. An interesting statement from the category *Others* is about the validation of own value. This was given by a teacher, who is at the same time a mother to a disabled child: "I was at home for thirteen years and I always thought I'm no good, I took care of M. but I thought I would never achieve anything in life, that my life has finished. When I started this job I knew I wanted to do it and I felt that I actually do something, help, that I am useful, and that what I do has some value."

**The second area** mapped the difficulties that the teachers encounter in educating pupils with severe multiple disability (see Figure 2).

| Subcategories: | Presence: |
|---|---|
| Fatigue and exhaustion | 11 |
| Slow progress and stereotype | 9 |
| Difficult comprehension of pupils | 7 |
| Unpleasant behaviour of pupils | 6 |
| Insufficient team cooperation | 5 |
| Insufficient methodological guidance | 4 |
| Insufficient staff | 4 |
| Risky health condition and fate of some pupils | 3 |
| The pupil does not cooperate with the teacher | 3 |
| Difficult situations with parents | 2 |
| Other statements relating to working with pupils | 9 |
| Other statements relating to organization and material provisions | 5 |
| Other statements not directly relating to education of pupils | 6 |

**Figure 2.** Difficulties that teachers encounter in educating these pupils.

The statements in the category *Fatigue and exhaustion* related to physical fatigue (2), physical demands of working with pupils with severe physical disability (9) and psychical demands (7). One of the teachers noted the following: "When we do clay modelling, it's very physically demanding for women to unfold their fingers, hold the clay for them, press, roll out, very difficult for the assistants." Naturally, physical demands relate to any transfers and physical manipulation with the pupil, which places considerable demands on the assistant teachers.

The category *Slow progress and stereotype* was aptly expressed by a statement describing the length of time taken by seating the pupils on the toilet: "When we go to seat F. on the toilet and do that every hour, we spend a lot of time on that toilet. And we have pupils who are ok in hygiene. Those next door, they're in the bathroom all the time. I think the teacher and assistant teacher should mainly work in the classroom. I don't mind doing that but I can either take them to the toilet or teach but not both, there's just not enough time."

The category *Difficult comprehension of pupils* is related to a study that analysed the factors facilitating comprehension of pupils with severe multiple disability (Kantor, 2014). The category *Unpleasant behaviour of pupils* included the following two reactions: unpleasant sounds (3), rubbing nails against the carpet (1), pupils intentionally relieve themselves (1), pupils vomit on the teacher or bite the teacher (1) and slobbering (1). The category *Insufficient team cooperation* related to cooperation with an assistant in the classroom (2), physiotherapists (1), specialised physicians (1) and in case of institutionalized schools also with a social service worker (1).

Another difficulty described by the teachers was *Insufficient methodological guidance*, as documented e.g. by the following statement: "Maybe it's nonsense but I grope in the dark, no one's gonna tell you what to do, many of the FEP outcomes are rubbish. If you have a curriculum, you have something to adhere to. If you have no curriculum, you have no guidance." The teachers also indicated that insufficient methodological guidance results in doubts about own work and own abilities. In this respect, two of the teachers indicated a need for more teacher education for special primary school teachers.

The category *Insufficient staff* relates to staff relocation (2) and situations when somebody quits (2). Working with pupils with severe multiple disability also involves coping with unhappy fates of some of them. The category *Risky health condition and fate of some pupils* included e.g. the following statement: "One six-year-old has just died after a coma. That's one of the sad things, you never know how long some of them will last. I'm not saying I'm sorry, it's better than to be grieving, but six years daily is six years daily."

In the category *Difficult situations with parents* the teachers mentioned a lack of trust and cooperation, and coping with unreal expectations of the parents. The category *Other statements relating to working with pupils* included e.g. one-sided communication with a negligible pupils' response, feelings of sorrow thinking about what a pupil could do without disability, feelings of helplessness and absolute dependence that teachers might experience, or situations when teaching is unsuccessful because the teacher brings own problems to the classroom.

*Other statements relating to organization and material provisions* included the difficulty of harmonizing the schedules of various pupils from various years and educational programmes by the teacher (deputy head), prices of professional courses that teachers need but cannot afford, insufficient classroom equipment and barriers in work built by the surrounding environment.

In the category *Other statements not directly relating to education of pupils* a typical statement is e.g. the following one that described a degree of deterioration of the teacher's personality: "I wanted the deputy head to assign me to some practical classes because I'm forgetting to read and write here. Really. I have to think about simple spelling and I'm a linguist. I don't say this to anybody." An interesting comment

came from a male teacher who was afraid of being accused of abusing female pupils during basal stimulation.

**The third area** mapped the strategies that teachers use in coping with difficulties associated with teaching pupils with severe multiple disability (this area is linked with the previous part). The categories in this third part including the respective numbers are specified in Figure 3.

| Subcategories: | Number: |
|---|---|
| Promoting a good working team and climate in the class | 21 |
| Teacher personality development (e.g. by means of teacher education, courses, etc.) | 11 |
| A good assistant or educator in the class | 10 |
| The teacher also teaches in other classes, or has another job | 5 |
| Setting real objectives in the area of pupil education | 3 |
| Various forms of supervision or intervision | 2 |
| Change | 2 |
| Others | 9 |

**Figure 3.** Strategies used by teachers to cope with difficulties

A considerable amount of statements in this area related to *Promoting a good working team and good climate*. In this context attention should be paid to the attributes that teachers use to characterize a good working climate. Throughout the interviews, the following attributes emerged in this category: good atmosphere, wellbeing, peace, family environment, good background, mutual trust, assistants and teachers work together, feelings of safety and security, corresponding structure and regimen, pupils and teachers experience together, feelings of contact with the pupil, good class relationships, good pupil motivation before learning activities, "playing around" with the pupil, music and basal stimulation.

Another significant category is *Change*, which the teachers described as enrolment of new pupils or a need to do "revolution in routine procedures". The category *Others* included for example short-term placements before the teacher is employed, humour, support of innovations and changes by the school management, personality of a teacher who likes stereotype, sufficient time for transition from work to a home environment, good observation skills that allow identification of small pupil progress, etc.

## 5 Discussion

The discussion section presents a summary of conclusion and examples of good practice according to a model by Hagemann (2012) relevant for teachers, leading employees and the educational system.

In the context of the teaching process involving pupils with severe multiple disability, an important finding is the fact that a number of valuable benefits result from the **interaction with the pupil**. The conclusions of this study suggest that a deeper theoretical understanding of the factors that influence the interaction process and development of the teacher-pupil relationship is one of the possible sources of effective strategies of professional support of teachers. Moreover, developing appropriate conditions in the classroom that facilitate effective interaction during the educational process might help teachers in the long run saturate their feeling of meaningfulness of their work and renew their internal sources required for teaching this group of pupils.

The theories relating to the education of pupils with severe multiple disability proposed by the author according to the research, considers this education a comprehensive process involving a number of sub-processes. These processes relate to adaptation, communication, pupil personality development, saturation of pupils' physical and health needs, family-level interventions, etc. The basis of these processes is the interaction process, which is performed vertically (interaction at a specific moment) as well as horizontally (development of the teacher-pupil relationship over time). Interaction is thus a significant process without which it would be impossible to carry out other processes of special education intervention.

During the interviews the teachers also mentioned specific strategies that might enrich the repertoire of techniques for coping with pressure in the classroom, e.g. by developing an adaptation space after a change from the working environment to a home environment. Some of these strategies are significant for **school management and leading employees** – this includes for example short-term placements before a teacher is employed, developing a schedule that provides an opportunity for teachers of pupils with severe multiple disability to teach in other classes as well.

**In terms of the educational system** and individual educational institution, below are mentioned specific forms of teacher support. Professional support of teachers of pupils with severe multiple disability is rarely based on supervision and intervision. Clinical supervision plays a significant role in the healthcare sector, which has underpinned its significance for a long time. Also in the area of social services, we frequently experience various forms of supervision-based employee support. So far, there are no data on using supervision in the area of education. However, based on the data acquired during this study it might be assumed that supervision is used by school institutions very seldom.

On the other hand, the results of the study suggest that currently teachers use a sort of friendly support in addressing specific issues and situations. Table 3 shows the most frequent statements in the category of promoting a good working team and good assistant or educator in the class. It is likely that teachers and assistants help each other in the classroom, analyse various issues and search for solutions to difficult situations. Obviously, this type of support cannot substitute for supervision, which provides external support of the whole working team. Similarly, these data do not imply that most teachers would welcome supervision if this type of support was available. To develop specific strategies of professional teacher support, various forms of support need to be considered (e.g. various forms of supervision, Balint or support groups) as well as ways of providing such support. Current reflections of teachers rather suggest a need for professional support, which would include supervision and case study techniques, etc. To recognize the significance of supervision in education it would be useful if future teachers gained some positive experience with supervision during their undergraduate study.

Other strategies of professional teacher support that need to be developed include **accessible educational opportunities**. This conclusion is in line with one of the frequent causes of the onset of the burnout syndrome, as described by Švingalová (2006). Educating pupils with multiple disability is professionally demanding and requires a high degree of professional erudition on the part of the teachers. Unfortunately, educational opportunities relating to working with pupils with severe multiple disability develop very slowly. In particular, there is a lack of practical courses (in the research we frequently noted missing methodological support); another problem is insufficient theory of educating these pupils. This situation results in the following two needs – importing foreign methodology and examples of good practice, and supporting domestic research and developing consistent theories and methodologies. The role of faculties of education at various universities in this process is naturally very important.

All of the mentioned strategies might be beneficial in terms of **prevention of the burnout syndrome**, whose development into a clinical form is usually a combination of personality predispositions of the teachers and long-term problems or excessive difficulties. Current research studies mentioned in the theoretical background of this paper suggest that women are more endangered by the burnout syndrome (Vercambre, 2009). At the same time, most teachers working with pupils with severe multiple disability are women. Out of the total number of 45 teachers included in this study only 2 were men; it might be assumed that there are even less male assistant teachers. Educating pupils with severe multiple disability is strongly affected by nursing activities, which are preferred rather by women.

The fact that the burnout syndrome threatens especially those teachers who are strongly committed to their work, presents a considerable risk for teachers of

pupils with severe multiple disability (Hagemann, 2012). Educating those pupils presupposes or ever requires the knowledge of the pupils' personal stories and a very close relationship, which might even take an "intimate form". This fact was visible during observations of the educational process in various classes and during research interviews with the teachers. A strong commitment predisposes to the development of the burnout syndrome and requires the knowledge of personal boundaries in distributing own energy to perform the necessary care.

Attention must be also paid to the validity of the conclusions of the whole study, which is limited by the study design and some other aspects. The quality-based type of the study was selected particularly due to the lack of evidence-based data relating to the education of pupils with severe multiple disability in Czech schools. A combination of semi-structured interviews and observations provided a basic insight into the issue and an overview of key categories of the investigated topic and some properties of these categories. Most data were acquired through the semi-structured interviews, the observations represented an additional method to verify the validity of the teachers' statements and to gain a deeper insight into the issue (in particular, the observations helped us understand the significance of the interaction factors in the process of education of pupils with severe multiple disability).

Guaranteeing the validity, which is required in scientific studies with a quality-based design, is usually based on triangulation, i.e. comparison of data from at least three sources. In the present study however, there were no other sources of data concerning the researched topic to perform triangulation. The author of the study is aware that this could have decreased the validity of the study. A solution could be to include a quantity-based survey with a larger number of teachers. However, such survey would require another research study. Apart from the aspects mentioned above, the contribution of this study is the fact that it brings a body of data material that can be used to design and perform a quantity-based survey.

Another suggestion for further research surveys is testing specific factors relating to pressure during education of pupils with severe multiple disability using standardized diagnostic tools, e.g. the Maslach Burnout Inventory. The observations in various classes revealed some common characteristics of teachers, which frequently repeated, e.g. calm nature and deliberate personal pace (which might have been associated with the slow personal pace of the pupils with severe multiple disability), but also a degree of creativity, spontaneity, authenticity, etc. It is likely that educating pupils with severe multiple disability requires certain personality and character features, which predispose teachers in a positive way to cope with practical requirements. Whether there is any association between the teachers' characteristics and practical requirements could only be confirmed by means of diagnostically valid data. To obtain such data will require further research. The conclusions of future research in

this area could enrich our understanding of the role of personality factors crucial in the development of the burnout syndrome with new and interesting data.

## 6  Conclusion

This study presented the so far unpublished conclusions of a quality-based study performed in Czech school involving teachers and also pupils with severe multiple disability. The objective of the study was to map the categories crucial for understanding the issue and to identify teachers' personal benefits as a result of educating pupils with severe multiple disability, difficulties that these teachers encounter in educating these pupils, and strategies that help teachers in overcoming these difficulties. The results of the present study were related to current theories and published conclusions concerning the issue of teacher pressure, development of the burnout syndrome and the issue of professional teacher support. The study also described some examples of good practice, discussed the validity of the research and suggested possibilities of further research in the area.

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# Sheltered housing – life satisfaction of people with mental disabilities vs. stress of workers

## (scientific paper)

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*Abstract: The paper deals with the presentation of partial results of the research which was conducted in order to evaluate the life satisfaction of people with mental disabilities who live in selected sheltered houses in Olomouc and Zlín regions. Further, the research is concerned with different strategies leading to stress management among workers in this platform. Quality of life is a multidimensional concept that has gained considerable attention in recent years. It is used primarily to evaluate personal satisfaction, as a quality indicator of service and success. It has a major impact on the mental development of the individual and his mental well-being. Variable aspects are not only time but also the experience that an individual acquires throughout life. In this process, the staff accompanying them to the path of independence plays indispensable part. The higher demands are placed on the staff that are therefore more vulnerable to stress and situations that produce this defensive reaction of the organism. Partial results of the research were obtained with the support of the student grant IGA_PdF_2015_003 Perception of the subjective impact of disability / presence of chronic illness and the concept of health awareness and literacy at Palacky University in Olomouc. The questionnaire of life satisfaction in the Czech translation by Rodný, Rodná (2011) was administered to 50 subjects in order to establish the life satisfaction in various areas: health, labor and employment, financial situation, leisure, person itself, social relationships, and housing. The results were compared with 50 subjects from Zlin and Moravian--Silesian region, where the Quality of Life Questionnaire by Shalock, Keith (1993), the Czech version mediated by Quip, was administered. This issue is closely connected with partial results of multidimensional self-observational inventory that captures individual tendency to use different ways of responding to stress in stressful situations. Construct applied in 32 subjects from Olomouc and Zlin region was a standardized questionnaire Stress Management Strategies SVF 78 by Janke, Erdmann in Czech translation by Švancara (2003). Partial results of the research were presented at the international*

*(Slovak Republic) and domestic conferences (Olomouc, Hradec Králové) and complete results will be presented in an upcoming publication.*

## 1 Introduction

Life satisfaction is currently a hot topic addressed by many researchers. Much of the research is trying to explain a construct of life quality. It is a multidimensional concept that must be applied especially in the social area, education and health care, as authors Gomez, Arias, Verdugo and Navas (2012) mention. The current trend of deinstitutionalization of large residential facilities and the transformation process show us a new dimension of life quality. This paper focuses on the life satisfaction of people with mental disabilities living in sheltered housing. The second part of the research focuses on the workers employed in this kind of social platform. Occupational load on social service workers may cause immune reactions, including stress. In today's world, stress belongs to everyday life. Stressful events are a part of every human life. It can be e.g. a death in the family, divorce, problems at work, school, etc. (Aldwin, 2007) In the first part, the information on social services, platforms of sheltered housing, social services workers, stress, quality of life and specifics of people with mental disabilities will be defined. In the second part, goals, methods, the specifics of the target group and partial interpretation of research results will be dealt.

## 2 Social Services

The great twists after the year 1989 came in the area of social services, when the conditions of political and economic life have changed fundamentally. The Czech Republic's accession to the European Union, whose strategy is based on creating new opportunities in the community and support the vulnerable population groups in order to prevent social exclusion, brought further changes. (Bartoňová, Bazalová, Pipeková, 2007) According to Novosad (2000), social services are a concrete outcome of social policy, which represents a relatively wide range of support measures and assistance that comes from the necessity to deal with adverse life situation of people with disabilities. As reported in Máhrová, Venglářová (2008), this system should include the greatest variety of services with the aim of preventive action in all spheres, leading to improvement of life quality.

The area of social services belongs to the Ministry of Labour and Social Affairs of the Czech Republic (MLSA CR), and help people to live a normal life, enable them to work etc. Social service represents activities that are provided under Act No. 108/2006 Sb. Social Services, as amended. This law clearly defines the types of social services, provides various forms of care from personal assistance through counselling to residential services and identifies devices that can provide them. It further regulates the conditions of providing assistance and support of individuals in an adverse social situation through social services and care allowance, the conditions for authorizing the provision of social services, and others.

At present, the sheltered housing is among ones of the rapidly expanding social services, which is provided to individuals with reduced self-sufficiency due to disability or chronic illness, including mental illness who need assistance of another person. (Act No. 108/2006 Sb.)

## 2.1  Sheltered housing

Sheltered housing for people with disabilities is governed according to law no. 108/2006 Coll. About social services, as amended, pursuant to § 51, where terms to help individuals who find themselves in a difficult life situation and its consequences require the assistance of another person are adjusted. This is a relatively new concept, falling within the competence of the Ministry of Labour and Social Affairs, section of Social Welfare. The concept is currently associated with the transformation process. The first projects have already emerged in the 90s, where the growing concern about the quality of care for people with disabilities and emphasis were placed on social care. This trend is related to the expansion of other social services by non-profit organizations.

Individual authors in this field correspond in many respects. Rada (2006) notes that in the modern and developed world there is an extended social service that allows independent living for individuals, who due to medical or social situation normally cannot live independently. Pipeková (2006) adds that the service allows users to live a relatively independent life in the common environment of own household. This is confirmed by Sobek (2009), who considers sheltered housing as an alternative to traditional institutional care. Users can live in a normal environment in the apartment or house and according to their abilities, they can take care of their home and live as independently as possible. The benefit is seen in social inclusion with the possibility of involvement to normal life.

Sheltered housing is a long-term service and its planning must be based on this fact. Accepting of new users is a specific process with certain rules. (Pipeková, 2006) Sheltered housing provides the full range of personality development for people

with disabilities. In connection with our applied researches we speak about activities that are associated with social skills (learning and activation) – working inclusion and productivity, independence, rights assertion – personal matters, the application of interest, breadth of social networks – mediating of the contact with society, community engagement etc. The importance of this form of housing is confirmed by domestic studies carried out in 2008–2011, which were attended by 95 people who wanted to leave the institution. The results showed that the place where these people want to live "*are determined mainly by offer of residential social services such as home for people with disabilities, sheltered housing.*" (Johnová, Strnad, 2012, p. 33)

Pipeková (2006) lists the various divisions of sheltered housing:
- The first of this form is usually built on the premises of the institution – home for people with disabilities. Users have a structured daily routine, contents of activities and their life is closely linked to the institutional environment. This is a way of humanization of the environment.
- Another type is the home of family type – these are few independent apartments. The total number of users should not exceed twenty.
- Sheltered flats are full form of user's integration. Users use the standard flats. The number of users ranges from 1–5, where everyone has their own room and the assistant who helps them in running a household. (Pipeková 2006)

The above mentioned is also confirmed by Švarcová (2011), who considers sheltered housing as one of the most advanced forms of perennial care. Sheltered housing has the nature of common household and assistants help adult users with everything they cannot cope themselves (e.g. cleaning, cooking, self-care, etc.). Assistant here is a consultant and helper. According to the author, a sheltered housing makes difference if users work, visit various centres and institutions for employment and leisure time. However, if the user spends most of his time in sheltered housing, he or she does not get in touch with the surrounding environment, then this service will not function properly and the integration of the individual into society fails. Contact with family and friends should be realized through mutual visits.

### 2.1.2  Worker in social services

Worker in sheltered housing i.e. social worker, but also other employees are always obliged to respect the privacy of users. This occupation belongs to the so-called helping professions. Hartl, Hartlová (2000, p. 185) define an umbrella term for a number of professions, whose job is to "help people" as "*collective name for all professions whose theory, research and practice focus on helping others, identifying and*

*solving their problems and acquiring new knowledge about man and his conditions of life, so that assistance could be more effective; including doctors, esp., psychiatrists, psychologists, social workers, special education teachers etc."*

Michalík et al. (2011, p. 14) states: *"We can say that in general we are talking about professions, which are oriented to the needs of man and its essential feature is such behavior towards another person, which is focused on solving the needs and providing support and assistance. An essential feature is also a focus on the individual needs. The main goal is to help and support and they are also the reasons for their existence."*

Providing support and assistance for given individual is very demanding work that requires certain worker's skills. As Hawkins, Shohet (2004) point out, it is very important that "helper" reacts in time to the first signs of overloading and make sure of support which will be provided if needed. The sooner we start working with threatening factors, the sooner we react to the stress caused by them.

## 3 Stress

In a broader context, this term reflects psychological burden. The American physiologist WB Cannon was the first one who began to deal with problems of stress. In 1915 he described the response to the threat, which he referred to as FF "fight or flight".

The term "stress" was used by H. Saly in 1956. His concept is now referred to as the "general adaptation syndrome" – General Adaptation Syndrom (abbr. GAS). (Křivohlavý, 1994 in Stackeová, 2011) The author also established the basic structure of stress:

- Eustress – positive stress, certain amount of stress is important for our lives and helps us grow, it is motivating and its result is better performance etc,
- Distress – a negative stress, excessive physical or mental stress, which is negatively perceived, it is a constant tension, can lead to burnout. (Kraska-Lüdecke, 2005)

According to Nakonečný (2004, p. 256), burden is "*psycho-physiological changes caused by situations which we cannot adapt to, respectively, situations that require excessive psychological or psycho-physical strain.*" Vágnerová (2000) understands the stress likewise – she designates it as an excessive burden or a threat. She also highlights a broader approach to the concept from the perspective of biomedical and psychological.

Conversely, according to Melgosa (1999), stress is not the anxiety, the fear, the direct cause of the disease (although it often contributes to its development).

Each defensive reaction of the organism has its cause. The stress is caused by a stressor that Atkinson (1995, in Urbanovská, 2010, p. 9) understands as *"any*

*circumstances, conditions or stimuli inducing stress in humans, oppressive feeling of tension, uncertainty or risk".* Stock (2010) divides these stressors on physical (noise, hunger …), psychological (time constraints, excessive workload …), social (conflicts with colleagues at work, bereavement …).

It is necessary to distinguish "stressful situations" that Urbanovská (2010) sees as a stressful situation or imbalance between the demands of the situation and competencies (capabilities, skills) needed to manage them from stressors. Praško (2001, p. 14) defines this "stress response" of the body as an *"alarm reaction of the organism, which mobilize the energy needed for rapid concerted action".*

Response to the stressor may have a sequence, the so-called General adaptation syndrome (GAS) have three basic stages:
a) alarm response phase – the first immediate reaction of the organism to stressors, the body reacts with shock, with the chaotic external reactions and dampening of defense reactions
b) resistance (adaptation phase) – relative calming of the organism, the organism activates mechanisms for stress relief
c) the stage of exhaustion – if stressors affect the organism for too long and the organism has no longer necessary adjustment means, it has the negative consequences, exhaustion often passes in pathologies (hypertension, immune disorders …).

To be talking about the general adaptation syndrome (GAS) all three stages do not have to become evident. Only the serious state of stress lead to a total exhaustion.

Avoidance of these stressful situations can be called coping strategies, which are conscious mental and behavioral-specific stress responses, which in addition to biological and physiological adaptation or defensive mechanisms enable an individual to cope with over-limit mental stress. (Urbanovská, 2010).

Authors Janke, Ermannová (2003) divide coping strategies to:
a) Action Strategy – e.g. the attack, escape, inactivity, social withdrawal, another chain of negotiations leading to a change or elimination of the stress response or reaction to stress
b) intrapsychic strategies – include diversion, underestimation, denial, reassessment etc., summarizes cognitive processes such as perception, imagination, thinking, etc.

Based on the experience these authors have created the questionnaire SVF 78 (originally SVF 120), in which they distinguish 13 basic coping strategies: underestimation, rejection of guilt, diversion, substitutive satisfaction, controlling

of the situation and reactions, positive self-instruction, the need for social support, avoidance, reflection, resignation and self-blame. This questionnaire was applied in our research.

Nowadays we can find more than 40 different kinds of defensive mechanisms, as stated Křivohlavý (1994) so called System DMI (Defense Mechanism Inventory) whose authors are Ihileviche and Gleser and where 5 groups are distinguished: inadequate or overly aggressive and hostile reactions, self-incriminating reactions, projections, crowding and denial, intellectualization and rationalization. These defensive mechanisms are one of the possible ways to handle stressful situations. Kebza (2005) and Křivohlavý (1989) consider these defensive mechanisms as a substitutive, not fully-fledged way of coping with stress. While the strategies to cope with life crises are seen as those which take account of the reality. (Křivohlavý 1994)

## 4 Life satisfaction of people with mental disabilities

As already mentioned above, there is currently a growing interest of many authors on life satisfaction / life quality of people with disabilities. This increased interest is not confined to the field of physical and mental health, but especially, as in the case of our target group, to integration of people with mental disabilities in the intact society (support at work and social inclusion), quality of service etc. The quality of life can be viewed from different angles. Objective quality monitors material security, social conditions of life, social status and physical health. It can thus be defined as the sum of economic, social, health and environmental conditions that affect human life. Subjective quality refers to the actual perception of one's position in society, when the final satisfaction derives from personal goals, expectations and interests. (Mühlpachr, Vaďurová, 2006). Čadilová, Jůn, Thora et al. (2007) add that all people with disabilities have the same rights to meet their needs as other citizens of the Czech Republic, i.e. the needs of safety, security and privacy, needs of belonging, esteem and respect, the needs of others. Selikowitz adds (2005) that people e.g. who are not able to handle some of its own affairs, and they need to be provided of some form of protection, particularly in the important decisions, but only to the extent that is needed are the exception.

### 4.1  An adult with mental disabilities

Adulthood of people with mental disabilities is not fundamentally different from intact adult persons. Hartl, Hartlová (2000, p. 120) defines it as *"the peak of development of specific function or set of functions"*, dividing it into biological adulthood, emotional, social and cognitive. Vágnerová (2004, p. 119) says that it is a *"period of freedom of*

*choice, connected with the responsibility for their decisions, and the ability to obtain and fulfil their relevant roles."*

Specific that plays a role in this area is the mental disability. Vašek (1994) states that it is an umbrella term that refers to a person located in the zone of mental retardation (IQ below 85). Regarding to a mental retardation, we talk about lower intellectual abilities (especially in cognitive, language, physical and social areas). (Valenta, Müller, 2007) personality specifics of the target group, however, are the particularities which cause that the physical presence in mainstream society still does not contribute to achievement of integration, but on the contrary, these people often remain due to the following grounds on the edge. Research has shown that people with mental disabilities often make friends with people with the same type of disability. (Emmerson, McWilly, 2004) Other authors much earlier pointed to a real key factor of integration, which is to induce the friendship of people with mental disabilities and the intact people. (Kennedy, 2000) International researches are trying to direct attention to individual areas and their influence, which are reflected in the life quality of people with disabilities.

### 4.1.1 Influence of various determinants on life satisfaction

The individual components of our lives have influence on overall life satisfaction. One of them is employment. In the case of people with intellectual disabilities we talk about the possibility that defines Employment Act no. 435 / 2004Sb., § 69 as vocational rehabilitation, *"continuous activity aimed at obtaining and maintaining suitable employment of people with disabilities"*. This is an activity that involves theoretical and practical training for future occupation under special legislation (Education Act 561/2004 Sb.). Currently, there are several options that differ in levels of potential success on the job market – the free work market (transit program, supported employment, sheltered work place, social entrepreneurship), day care centres, clinics and socio-therapeutic workshops. The individual needs of individual motivation, experience with job training etc. are always taken into account.

The possibility of employment does not symbolize just a great economic independence for people with mental disabilities but it is also closely linked to lifelong learning and has fundamental influence on the development of individual competencies. That is a preventive factor in the fight against socio-pathological phenomena. (Černá, 2008) a constituent of their own self-realization should not to be overlooked. (Pipeková, 2006) From the results of research the positive relationship to work was found with people with mental disabilities. The importance of forms of housing was reflected in better money management and the ability to independently find work for people from sheltered housing. Dependence on care and support

services is reduced through the work. (Kasáčková, Kozáková, 2014) People with mental disabilities note the importance and indispensability of work in their lives and freedom of choice in its selection. In connection with this fact, the extension of social contacts with intact individuals with regard to the stay in a natural environment was positively assessed. (Kasáčková, 2014)

Following opportunity for social interaction e.g. a form of socio – therapeutic workshops aimed at training people with mental disabilities in social skills. Here the emphasis is on the development of theoretical and practical skills that these people once acquired during compulsory schooling. People with intellectual disabilities educated through this form perceive opportunity for education as an essential part of preparing for future jobs. In the long term, preparation for the work process and subsequent employment have beneficial effect, which has been confirmed by intact society. (Kasáčková, Kozáková, 2014)

Acquiring the necessary skills and competencies needed for life allows a person with mental retardation smooth transition. Leisure activities have a major impact on shaping the personality of the individual. It is important to know how to use them effectively. At this time, we should pursue activities that we love and which bring us joy and relaxation. This is not an obligation. It is a time when you must, on the contrary, get rid of work and responsibilities. (Pávková, 2002). To imagine how they can spend time can be very difficult for people with mental disabilities. Especially for people who move from homes for people with disabilities, where the leisure activities are organized, into sheltered housing, where they have personal choice. In this case, they can take advice of assistant, who may offer the user some options. (Matoušek, 2005) *"One of leisure opportunities for people with mental disabilities are programs in day care centers, where clients can come in the morning or in the afternoon after work. Activities may take the form of various interest groups, artistic or occupational therapy. Some clinics operate according to individual plans, thus trying to support users in the development of various skills"* (Matoušek, 2005, p. 125), motivation and spontaneous interest of the person play an important role.

All of the above mentioned determinants play an important role in the socialization process, i.e. the level of integration of the individual into society. It is a never ending process, which has an impact on the personality of the man and his individual requirements (standards, values, etc.). It is the interaction between the individual and society. (Vágnerová, 2004)

## 5 Methodology and research goals

The main objective of the first part was to analyse the life satisfaction of users with mental disabilities in sheltered housing in Olomouc and Zlín and subsequently compare with the life quality of people with mental disabilities from sheltered housing in the Moravian-Silesian, South Moravian and Zlin Region.

The main objective of the second part of the research was stress management using certain strategies for workers in sheltered housing in Olomouc and Zlín regions.

**Methods**

The main method for data collection was a questionnaire of life satisfaction from Rodného, Rodné (2001). The questionnaire includes 10 areas for which the subjects answer on a 7-point scale (from very dissatisfied – 1, to very satisfied – 7). Total score of each field is converted by age of subject to a standard score called Staninov standard. Due to the specifics of the target group, we could not evaluate overall life satisfaction, because our subjects did not always meet conditions for completing the required fields – the absence of an intimate partner, marital or absence of their children. Applied method was complemented by socio-demographic data. Data were evaluated quantitatively. The second tool was a life quality questionnaire by Shalock and Keith (1993), based on the completed pilot study to validate a research tool in 15 respondents with mental disabilities. This questionnaire was administered in a form of structured interview (questionnaire conditions allow it), thanks to which errors will be minimized. The questionnaire contains closed (selective) questions. It is made up of four psychometric scales, each of which is composed of 10 questions and the overall score is calculated out of them. We are talking about the area of satisfaction; ability / productivity; the possibility of decisions / independence; sense of belonging / community involvement. The result in each scale may be in the range from 10 to 30 points, while the higher the result the greater satisfaction etc. The total score is the sum of the results of these various domains and it moves in the range from 40 to 120 points.

The second research survey used a standardized questionnaire Stress Management Strategies SVF 78 by Janke, Erdmann (translated and edited by Josef Švancara). It is a multidimensional introspective inventory showing the individual tendency to use different ways of responding to stress in stressful situations. He proved himself in comparing groups exposed to various forms of stress (in all difficult situations, in the field of health psychology, psychology of illness, occupational psychology, etc.) (Janke, Erdmann, 2003).

Both questionnaires were evaluated by a competent person so designated, i.e. psychologist.

**The sample**

Subjects consisted of 50 users with mental disabilities in sheltered housing, who were selected by simple intentional (purposeful) selection, which according to Miovský (2009), we select potential research participants who meet certain criteria, therefore they are suitable subjects in research, but with the condition of consent in case of their inclusion. Due to the specifics of this group of people questionnaires were filled out in 15–20 minutes, compared with an average reported length of 5–10 minutes.

The data were collected in the period of 02 / 2015–04 / 2015. Addressing users knew the environment well and had confidence in researchers after learning the details of this research.

The results were compared with 50 subjects from Zlin and Moravian-Silesian region, where the Quality of Life Questionnaire by Shalock, Keith (1993), the Czech version mediated by Quip, was administered. Condition set by researcher wasthe stay of users in sheltered housing for 1–5 years (dated to the day of the start of survey) from the year 2011. Sheltered housing was included into random selection, whose creation was supported by the project 1st call for Intervention area 3.1, regarding the process of transformation of residential social services in a different type of social services.

Due to the specifics of this group was to fill out questionnaires time allocated 15–20 minutes. The data were collected in the period of 05 / 2015–07 / 2015.

The results of the second part of the research were the questionnaire of SVF 78. The questionnaire is intended only for adults aged 20 to 64 years, deliberately it does not use the word "stress". It is assumed that a subject works separately. Our group consisted of 32 respondents-workers from sheltered housing in age from 20 to 64 (respondents were divided according to the age by the SVF 78 questionnaire into three grades: 20–34 years, 35–49 years and 50–64 years). Total time to complete the questionnaire is usually 10–15 minutes. Filling in the questionnaire should not be interrupted, otherwise it is impossible to interpret part of the questionnaire. (Janke, Erdmann, 2003) There are a total of 13 subtests (coping strategies). Each subtest consists of six items. In total, the questionnaire contains 78 questions (items). Individual subtests are further divided into positive and negative strategies. Positive strategy is divided into POZ1, POZ2 and POZ3:

POZ 1 – reassessment and devaluation strategy – for these strategies there is an effort to rethink (especially reduce) the severity of the stressor, stress response.

POZ 2 – diversion strategy – subtest includes the tendency to move away from stressful situations / events and / or inclination to substitutive (alternate) situations / states / activities. With men, we see a slightly higher tendency of this kind.

POZ 3 – Control Strategy – subtest consists of a circuit which includes the constructive efforts of managing / controlling and responsibility.

POZ – positive strategy – POZ1, POZ2 and POZ3 together.

NEG – negative strategy – There is a tendency to use negative, stress, boosting methods of processing stressful situations.

Compared to the previous version of the questionnaire – a questionnaire SVF 120, education is not seen as a screening factor in SVF 78.

**Interpretation of results**

A standardized questionnaire of Life satisfaction in Czech translation by authors Rodný, Rodná (2001) was completed by the respondents with mental disabilities from sheltered housing in the Zlin and Olomouc regions. The total number of respondents is 50. Distribution of respondents into age groups 14–25 years, 26–35 years, 36–45 years, 46–55 years, 56–65 years, was important to properly evaluate the different areas of a standardized questionnaire. The suitability of this instrument was verified by comparisons with the life quality questionnaire by Shalock, Keith (1993), which is intended for a target group of people with mental disabilities. Partial results of this research were obtained from other respondents of sheltered housing in the Zlín and Moravian-Silesian region. For greater clarity, the respondents were age-divided according to the same criteria as the previous tool.

**Table 1.** Distribution of respondents by age QoLS

| age | women | | men | | total | |
|---|---|---|---|---|---|---|
| | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency |
| 14–25 | 1 | 2% | 0 | 0% | 0 | 0% |
| 26–35 | 13 | 26% | 14 | 28% | 27 | 54% |
| 36–45 | 9 | 18% | 7 | 14% | 16 | 32% |
| 46–55 | 1 | 2% | 3 | 6% | 4 | 8% |
| 56–65 | 2 | 4% | 0 | 0% | 2 | 4% |
| total | 26 | 52% | 24 | 48% | 50 | 100% |

**Table 2.** Distribution of respondents by age QQoL

| | women | | men | | total | |
|---|---|---|---|---|---|---|
| age | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency |
| 14–25 | 1 | 2% | 0 | 0% | 1 | 2% |
| 26–35 | 11 | 22% | 8 | 16% | 19 | 38% |
| 36–45 | 6 | 12% | 10 | 20% | 16 | 32% |
| 46–55 | 8 | 16% | 3 | 6% | 11 | 22% |
| 56–65 | 3 | 6% | 0 | 0% | 3 | 6% |
| total | 29 | 58% | 21 | 42% | 50 | 100% |

We used questionnaires to more subtle differentiation of acquired data. Subsequent partial results deal with different areas of life of people with mental disabilities in comparison with the standard (ie. people intact). The second questionnaire (QQoL) is compared with the norm of persons with mental disabilities.
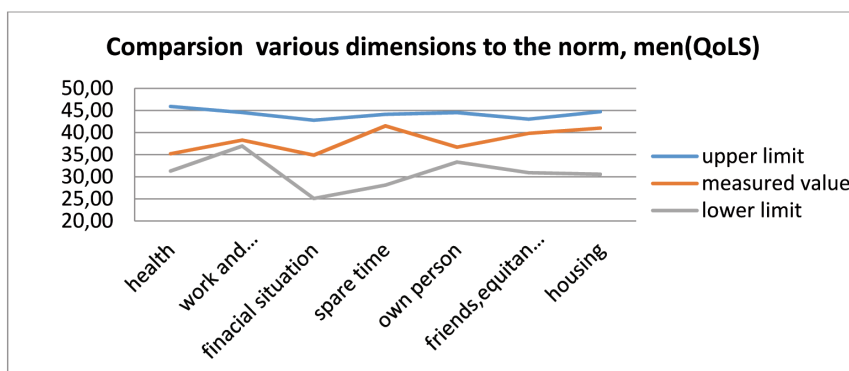


**Chart 1.** Comparison of different areas with the norm, men (QoLS)

Chart 1 gives us insight into different aspects of life and their relationship to a given standard. We concluded from these results that partial results for men with mental disabilities in the areas of health, work and employment, financial situation, leisure, person itself, friends, acquaintances and relatives, living are in comparison with intact populations completely normal and do not show significant deviations.
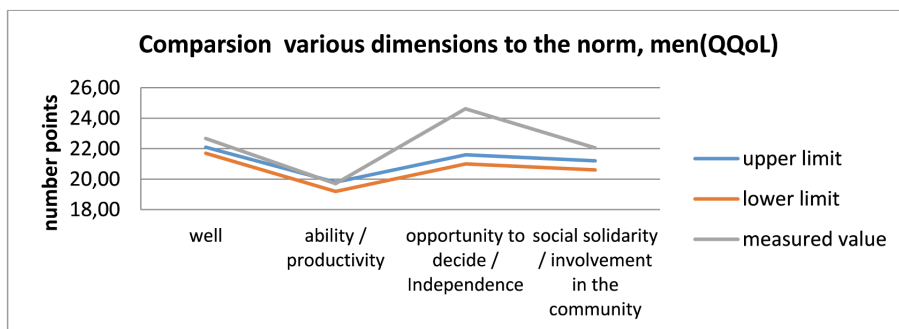
**Chart 2.** Comparison of different areas with the norm, men (QQoL)

Chart 2 shows the results which were compared with the norm of men with mental disabilities. The results show the following facts. Deviation of satisfaction is above the upper limit of norm. We monitor a slight deviation, which almost coincides with the upper limit of the ability / productivity. From this result we can say that men from the sheltered housing that are employed are mostly satisfied with this work, as well as with financial rewards, and also with the relationships in the workplace. A highly rated area above the upper limit of norm is considered as an extreme deviation. This is an area of the possibility of decision / independence. This means that the form of sheltered housing represents more freedom of choice, freedom of movement and independence to make decisions on matters of their life for men.
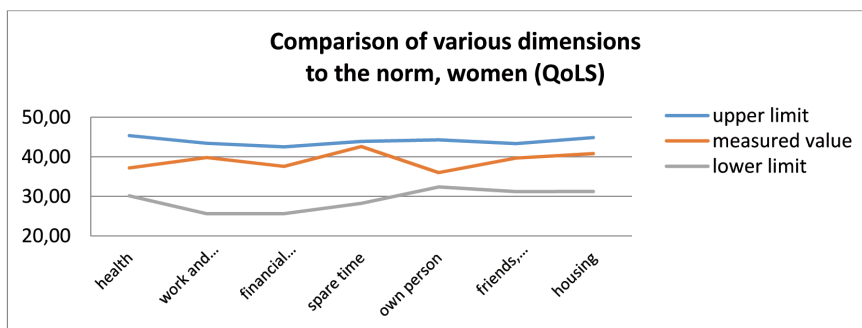


**Chart 3.** Comparison of individual areas compared to the norm, women (QoLS)

Chart 3 shows us the satisfaction of women with mental disabilities in various areas of life. On closer examination, we might say that the area of free time for women with mental disabilities is approaching the upper limit of the satisfaction of intact

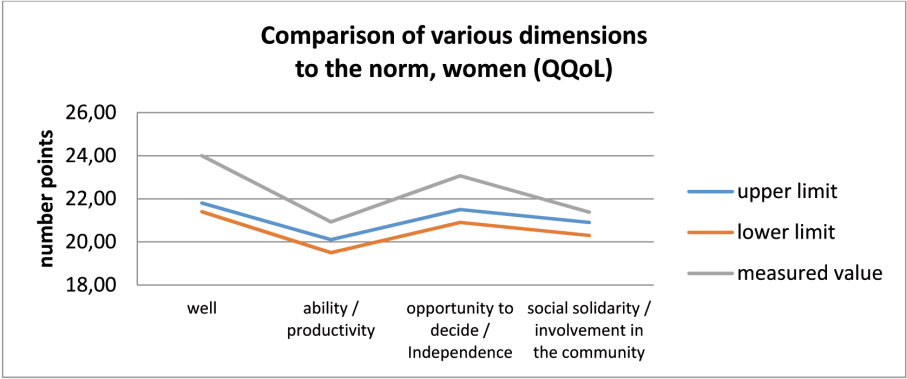females, which demonstrates that even people with disabilities spend their time as valuable as intact people.



**Chart 4.** Comparison of individual areas compared to the norm, women (QQoL)

Chart 4 confirms that women with mental disabilities from sheltered housing are excessively satisfied in all areas of their lives, compared with the norm of women with the same type of disability.

Workers in sheltered housing were given a standardized questionnaire Stress Management Strategies SVF 78 (Streβverarbeitungsfragebogen) by authors Wilhelm Janke and Gisela Erdmann. Joseph Švancara translated that questionnaire Into the Czech language. The partial results of this research will present data from 32 respondents. The following table shows the age distribution of respondents.

**Table 3.** Distribution of respondents by age

| age | women | | men | | total | |
|---|---|---|---|---|---|---|
| | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency | Absolute frequency | Relative frequency |
| 20–34 years | 9 | 28,12% | 4 | 12,50% | 13 | 40,62% |
| 35–49 years | 10 | 31,25% | 2 | 6,25% | 12 | 37,50% |
| 50–64 years | 4 | 12,50% | 3 | 9,38% | 7 | 21,88% |
| total | 23 | 71,87% | 9 | 28,13% | 32 | 100,00% |

Distribution of respondents in age groups 20–34 years, 35–49 years, 50–64 years, is important for a proper evaluation of the individual subtests of a standardized questionnaire SVF78. The questionnaire is used to finer differentiation of the obtained values. The following charts will examine different strategies for women and men in comparison with the norm.
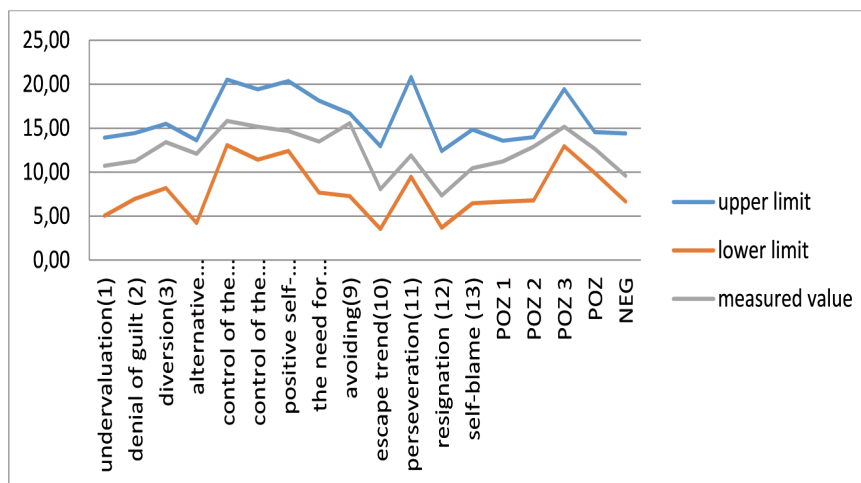


**Chart 1.** Comparison of different coping strategies with the norm, women

Chart 1 shows that all the strategies for coping with stress are among workers of sheltered housing in the standard. There is no subtest in which workers would be below / above the norm. Interview SVF78 distinguishes 3 categories of positive strategies and 1 category of negative strategies:
POS (positive strategies) – POZ1, POZ2 and POZ3 together.
- POZ1 – Strategy of rethinking and strategy of devaluation – this is an effort to reduce / re-evaluate the severity of the stressor, stress response.
- POZ2 – subtests include the tendency to move away from a stressful situation or a tendency to shift to substitute situations / states etc.
- POZ3 – these subtests deal with a constructive effort to managing / control and responsibility. NEG (negative strategy) – subtests in this category includes the tendency to deploy stress reinforcing ways to handle stressful situations.
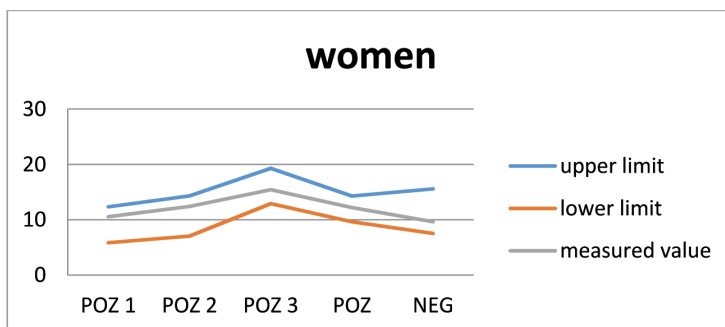
**Chart 2.** Comparison of the positive and negative coping strategies with the norm, women

It is again seen from the chart 2 that the individual positive and negative strategies are quite normal. A closer comparison of strategies for women in different age groups shows that:

- Women aged 20–34 are slightly below normal in the strategy NEG,
- Women aged 35–49 are slightly above the norm POZ2. This means that they have e.g. a greater tendency to substitute satisfaction (good food, buying clothes).

The following charts will focus on men – workers in sheltered housing
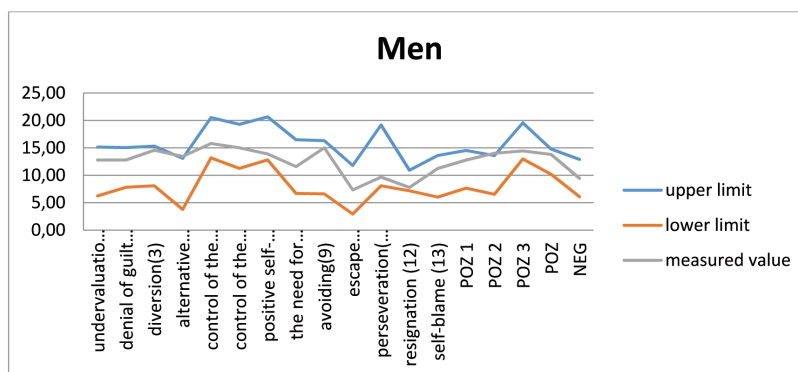


**Chart 3.** Comparison of different coping strategies with the norm, men

When looking at Chart 3, we see that the only deviation from the norm for men as a whole is in the subtest 4 – Substitutive satisfaction. Deviation from the norm is at least higher than the norm, and it is possible to say that men have a slightly higher tendency towards behavior that is focused on positive emotions, which are not compatible with stress (e.g. Good food).
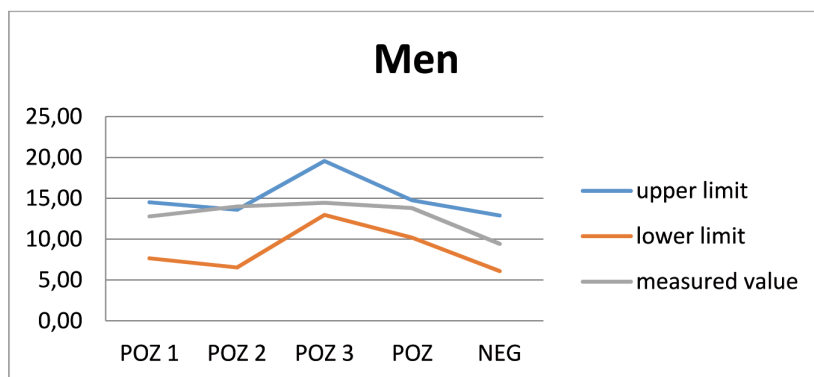
**Chart 4.** Comparison of the positive and negative coping strategies with norm, men

Chart 4 shows that men have a slightly larger deviation from the norm in POZ2 as well as women in the age group 35–49 years, they have a greater tendency to move away from a stressful situation or a greater tendency to shift towards substitutive satisfaction. If we look at the man in detail (by age categories), we find that:

- Men of all ages have slightly higher deviation from the norm in POZ2,
- Men aged 20–34 also have a slightly lower deviation from the norm in POZ3 – less constructive tendency to cope with the stressful situation.

## Conclusion

Partial results of the research, whose detailed overview will be further dedicated inforth coming publication IGA_PdF_2015_003 Perception of the subjective impact of disability / presence of chronic illness and the concept of health awareness and literacy at Palacky University in Olomouc, brought interesting insights. People with mental disabilities living in sheltered housing show a high level of satisfaction in individual areas. Although, the first applied questionnaire (QoLS) is compared with intact population, even in this case, these people are satisfied in a given standard, which shows that they were easily included into our society. The results from the second survey (QQoL) confirm this fact, and furthermore it confirms that people with mental disabilities compared to their peers (norm of people with mental disabilities), by contrast exhibit excessive satisfaction in all areas that are above the upper limit of prescribed standards. The results for men and women are also very interesting because more extreme fluctuations appear with men than with women, when satisfaction is rather constant above its upper limit. It may mean that man are more enthusiastic, while women are more deliberative and rational. These results

confirm that the platform of sheltered housing plays a very important role in the lives of people with mental disabilities, and has a positive influence on them in the context of overall life satisfaction.

Despite the fact that the staff of sheltered housing belong to the so-called helping professions, where stress is on daily basis, the partial results of the research presented in this paper show that women handle stress very well. Men are sometimes out of the norm regarding the coping with stress, but there is not many large deviations. For men, the standard deviations are shown in infrequent strategies – subtest 8 and 9. Compared to women, men have a higher tendency to seek social support during stressful situations altogether with total avoidance of stressful situations and also a higher tendency to substitutive satisfaction, i.e. act which is focused on the positive feelings that are not associated with stressful events.

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# Inclusion of a girl with Down syndrome in general physical education focusing on selected physical activities, dancing, skiing and swimming

## (scientific paper)

**Lubomír Král, Eva Králová**

*Abstract: Pupils with Down syndrome and other cognitive and physical disabilities are usually educated in special schools in the Slovak Republic. The paper presents the qualitative research results of including a girl with Down syndrome in general physical education classes. This experience of empowering and supporting diverse academic and/ or social learning among pupils of all abilities is called inclusive education. The authors depict the potency of the selected physical activities, gymnastics, elementary dancing and rhythmic activities, skiing, and swimming on a girl with DS. The focus is chiefly on the factors affecting her health status and motor skills. The potency of the intervention was proven in all the spheres of girl's development, health, mental, social and emotional.*

*Keywords: Down syndrome, inclusion into Physical education, spheres of health development*

## 1  Introduction

Although Down syndrome (DS) is a disability, not illness, it can still be described as "Down illness" or "Morbus Down". These appellations are out-dated and they do not describe the diagnosis itself. DS is a genetic condition that leads to a broad range of cognitive and physical developmental delays. In children with DS there are also present delays in motor development, because the reduced size of the cerebrum, brain maturation disorders, and pathophysiological processes lead to motor development delay. In DS there were described more than 120 characteristic symptoms, but in the majority of children with DS only 6 or 7 are present. They can vary to a great extent in terms of ability, but have certain physical features in common. Approximately half of them have heart defects or hearing difficulties due to differences in ear structure

(Selikowitz, 2005). According to Delacruz and Gerald (In Capkova et al., 2014) chromosome 21 is the smallest human chromosome that includes approximately 1.4 % of the total human genomic length. Trisomy 21 is the main abnormality associated with this chromosome and is the commonest genetic cause of mental retardation, which affects 1.3 per 1000 live births. DS can be associated with the following physical features: small head, ears of unusual shape and structure, upward slanting eyes, and celiac disease.

The most common disorder in children with DS is their disability to concentrate and conduct, emotional and motor deceleration, and low muscle tone (hypotonia) that negatively affects fine and gross motor skills. Motor development is very important as it encourages perception, speech comprehension and higher forms of intellectual functions. Children with DS have the following strengths, they are hardworking, persistent, friendly, kind, and generous, they are able to get along with others they like to play, run and be a part of collective. These positives enable them to be successfully included in general education by following the particularities of DS while at the same time, teachers should be tolerant, understanding, creative, able to support and help them. The following methods are largely used in the Slovak Republic for the treatment of physical and mental impairment in children with DS Vojta method, Bobath approach and regulation therapy by Castillo-Morales, and Feuerstein method. Physical activity is in general one of the key factors of building healthy lifestyle. The inclusion of physical activity into daily routine affects disabled and intact children's physical and mental health.

The authors of the paper present the selected qualitative research results of an inclusion of a girl with DS in general physical education classes. There was proven potency of gymnastics, games, elementary dance with rhythmic activities, skiing and swimming on her health status and motor skills.

## 2  Theoretical background on the inclusion of a child with Down syndrome in general physical education classes

Currently, the education of pupils with special educational needs in general education school classes, is addressed in the Act 245/2007 Coll. on education (School Act) from May 22nd, 2008, and on modification and replenishment of some laws. According to this document school integration is *"education of children and pupils with special educational needs into school classes designated for children or pupils without special educational needs"* (article 1, § 2, par. s). The main aim of this integration is successful socialisation and acceptance of a human being, the success of which depends on educator's tolerance, support, creativity and help. An individually integrated pupil

may be educated in general education schools or in special schools established for pupils with specific cognitive or physical disabilities. For an individually integrated pupil is developed an individual educational plan.

Beside the 'integration' there is the possibility of 'inclusion'. Although these terms are being mixed by some authors there is a difference in meaning. According to Mittler (In Lechta, 2010) an **integrated** child should be prepared for his or her integration into educational institution while at the same time he or she should adapt to an institution's conditions. On the other hand, social inclusion is, in Mittler's opinion (ibid.), based on the acceptance of diversity in terms of gender, nationality, race, language of origin, social background, and on the level of individual's disability or performance. This way of welcoming, empowering, supporting and valuing diverse academic and social learning among pupils of all abilities is so called **inclusive education**.

However, when the children with DS are tolerated by major community, so called intact individuals, from their side it is more a certain form of integration than inclusive trend. In this respect this can be considered hidden social discrimination. Požár (In Jesenský, 2000) in similar situations recommends realising co-adaptation trend whereby there should start the relationship of partnership among the majority group (intact children) and minority group (children with DS or other disabilities), in which there can be formed new values by the penetration of values from both groups. Sande (In Lechta, 2010) mentions the inter-stage between integration and inclusion so called **co-operation** between institutions on a partnership basis.

**Successful learning process** is preceded by early child care under the guidance of following experts: special education teachers, psychologists, paediatricians, speech therapists, physiotherapists and social workers. Compulsory school attendance may be completed at a special elementary school according to three various variants of curricula. After its graduation the children can enter vocational or practical school. However, increasingly common form of education is the integration of the child in the general elementary school which might result from the fact that the abilities of a child with DS enable him or her for the integration. Their integration is thus highly recommended, especially given the fact that children with DS can learn especially by imitation (Šustrová, 2004).

Carefully selected **physical activities** are in general considered favourable conditions for full and harmonious development of child´s personality. They are used for the maintenance of healthy physical development and have psycho-regulation effect. They have the function of active relaxation, increase resistance to disease, stress and contribute to the overall mental balance and psychological well-being. This effect can be found both, in disabled and intact children who live a healthy lifestyle and engage in regular physical activity. Their other benefit is social effect resulting

from positive experiences from performing sport in a group of children and from developing new relationships.

Elementary dancing can be used as a form of therapy for its positive impact on human emotions. As a form of therapy dancing began to be used since 1940 to improve mental and physical health. Curricula of physical education for disabled students, that are valid in the European Union, describe movement therapy as the therapy where dancing of an individual can be integrated in the process supporting his or her emotional, cognitive, physical and social integration (Van Coppenolle et al., in Cavill et al., 2001). Králová (2015) claims that every song or composition has its specific mood, thus it can form an individual not only from physical, but also from affective and moral aspect. And moreover, dancing persons can experience pleasure and satisfaction in pleasant atmosphere of music.

The need for natural movement is very strong in young children, but it is reduced in older children and naturally reduces the amount of physical activity performed (Chovanová, 2013). In children with DS the need to move remains for longer time. Bendíková (2009) claims that liberalisation of the curriculum of school subject Physical education (PE) places an increased demand on a PE teacher especially when they select new and modern physical activities. Among conditions for effective teaching process, creative-oriented methods can be used. They are oriented towards experience, emotionality, relationship of every pupil to physical activity. By means of them physical education can support emotional, intellectual and aesthetical personality development, formation of creativity which leads to healthy lifestyle of pupils.

## 3  Methodology

The conclusions presented in this paper are based on the study mapping the education of children with DS included in a general physical education (PE) classes. In the study we used a quality-based methodology (content analysis of pedagogical and psychological documentation and observation); performed the interview with the girl´s mother and evaluated the results of physical tests.

The **objective** of our intervention was to develop and evaluate the set of exercises and physical activities for a girl with DS included into general PE classes with intact children. The intervention programme was carried out at a rural elementary school in central Slovakia.

The basis of non-standardised test was a test battery *Unifittest 6–60* which is described in detail by Vrbas (2006). After the processing and assessment of pre-testing (observation and interview), we developed an exercise programme of elementary gymnastics, movement games and rhythmic activities, elementary dancing, exercises

with a fit ball and mats, swimming and skiing. By pre-test (interview and observation) we wanted to evaluate the relationship of a girl with DS towards physical activity and movement. In the beginning of three year intervention she was in the 5th grade of elementary school. Based on aforementioned we selected the appropriate thematic areas that were interesting for her. We were in contact with her mother who constantly informed us of her daughter's health status and feelings during physical education classes.

The data analysis of performance pre-tests had indicated that the girl could be successfully included in general physical education classes at elementary school. Considering that at the rural elementary school there were also other children with DS, we selected and prepared the most appropriate exercises, games and sports that could be used for children with similar disability. We developed intervention programme for each class, especially designated for disabled pupils with DS and associated health problems.

## 3.1 Intervention programme

The intervention programme during physical education classes for a girl with DS consisted of the selected physical exercises, movement games and rhythmic activities, a few elementary dances realised during physical education classes, and of swimming and skiing during training courses. During elementary gymnastic exercises and selected physical exercises there was used thoroughly selected background music that was acceptable and pleasant for the girl.

A few days before the intervention started in the school year 2010/2011 we realised pre-testing. The girl was in 5th grade and pre-tests were aimed to evaluate her movement skills. Her mother was present during testing. The results were gained in the years from 2011 to 2013 and are demonstrated in the table 1.

During the intervention the elementary school had a subsidy of 3 classes of physical education (PE) per week, 99 classes per school year. The girl with DS was engaged in physical education with another two classes, which increased PE classes to 7 classes per week. She was taught the other school subjects according to the curriculum for special elementary schools. Therefore it was possible to increase the subsidy of physical education classes for her. Her mother was present in every physical education class. Despite the fact that the girl was present at all PE lessons, she could perform the physical activities from some thematic units that were selected and prepared exclusively for her.

Within physical education the girl was involved in chasing games, relay races, hitting the target, various games and rhythmic activities, and elementary dancing developing orientation and co-ordination skills, jumping and crawling in various

climatic conditions, for example in water, snow, or gym. She was involved in individual swimming course (10 hours per week) and ski educational courses. Since 2010 the girl participated in three ski courses which were realised in winter of 2010/2011, 2011/2012 and 2012/2013. Her mother and physician were present during these courses, and the girl acquired elementary ski skills. Since then she goes regularly skiing in the mountains and every year participates in school ski courses. She also owns skiing equipment and skiing outfit. The post-tests in the table 2 map the period of three school years from 2010 to 2013.

## 4  Results

The results shown in the tables 1 and 2 should be understood within the context of related facts as informative and initial, with respect to the inclusion of a child with DS in general PE classes. From the data characterising the investigated girl, we selected the ones that refer to the specified objective.

The results of the first mapped area, elementary motor skills, are shown in the table 1.

**Table 1.** Results of Elementary Motor Skills

| Discipline | Pre-test 2010/2011 | Post-test 1 2010/2011 | Post-test 2 2011/2012 | Post-test 3 2012/2013 |
|---|---|---|---|---|
| Depth of forward bend (cm) | −11 | −6 | +1 | +5 |
| Sitting / prone position | 7 | 13 | 16 | 17 |
| Hitting the ball in circle with Ø 1 m | 1 | 3 | 6 | 8 |
| Standing on one leg / sec. | 0 | 1 | 5 | 7 |
| Swinging on fit ball (into fall/sec.) | 8 | 15 | 35 | 42 |
| Push ups / repetitions | 2 | 6 | 9 | 9 |
| Squat, knee-bend / endurance | 2 | 7 | 14 | 15 |
| Testing running 4 × 20 m / sec. | 65 | 51 | 36 | 27 |
| Passing a ball in pairs | 2 | 5 | 11 | 15 |

The results of the second mapped area, anthropometric values, are shown in the table 2.

**Table 2.** Anthropometric values
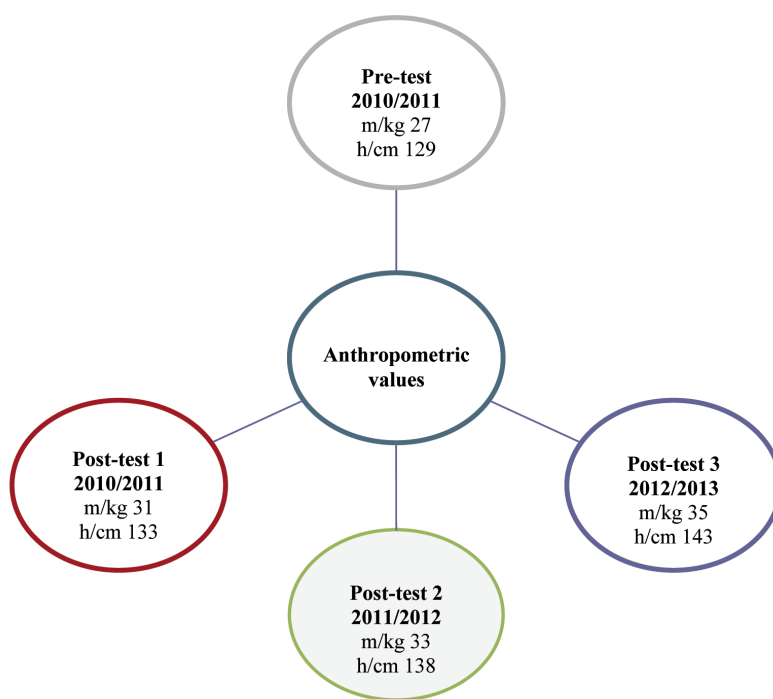


The measured values indicate that motor abilities of the girl with DS improved after the intervention. Significant improvement of movement skills was reached in gymnastics, movement games and rhythmic activities and elementary dances developed for her, in swimming and skiing. The girl further improved her running technique and her muscle tone was increased. Children with DS are characterised with excessive weight in childhood, however, the girl did not put up on weight due to regular physical activity during PE classes and in her free time.

During the inclusion in general PE classes, the girl gained new movement skills in swimming and skiing, the quality of which do not reach even healthy children. By means of movement activities the quality of movement improved in the girl – her gait was smoother and more coordinated. We consider aforementioned a success, because almost every discussion of motor development in children with DS deals with hypotonia (poor muscle tone) and lax ligaments which are considered obstacle for their motor delays. Jobling (1999) indicates in his study of the motor skills of 81 teenagers, that balance and strength is a particular difficulty and remains to be a

weakness in teenage years. He found out that children with lower mental ages tended to have lower motor skill scores. This is probably the reason why young individuals with DS can ride a bicycle or a tricycle with difficulty. However, this was not proven in our girl after 3 year intervention, because currently she has been very competent on her tricycle. Her mother said: (…) we bought our daughter a tricycle. Now she is able to master 5 km without problems (…)".

There were proven also social benefits of the intervention, as the girl enjoyed sporting and recreational activities with other "intact" children who, on the other hand, learned how to respect and accept their disabled schoolmate as a part of their class. This kind of empathy was evident especially during skiing and dancing.

During three year intervention programme we did not have accident, nor damage of the girl's health status. This fact is a feedback for us, that the exercises developed for her were selected and prepared correctly. Thus we believe that they contributed to higher quality of educational process during general PE classes where the girl with DS was included.

The girl's mother evaluated the inclusion into general PE classes as follows: "(…) my daughter started attending general PE classes in the 5th grade. The inclusive physical education programme was developed exclusively for her by her new class teacher. (…) Even if the beginning was quite tough experience, her classmates gradually got accustomed to their new, somewhat 'different' classmate. (…) Her health status improved in a significant way after three years of regular exercising, the benefits of which can be seen on her gait and overall posture. She is able to walk up the stairs without support what was previously impossible for her. Her balance is much better and frequent falls on the ground are already past experience, I hope. Her improved health status was surprising even for daughter's neurologist. She was slim and in a very good condition. On the other hand other children with DS that we knew were relatively obese and clumsy. (…) In the 5th grade we planned sledging during educational ski course with her PE teacher. However, her orthopaedist approved swimming, skiing and cycling. She went there with borrowed skiing equipment and outfit. She especially enjoyed slow downhill skiing, but braking was a bit problem for her. Now we have own skiing equipment, outfit and go skiing in our free time. This year (2013) she was able to use a ski lift and braking was not a problem for her. She managed skiing on gentle slopes. (…) She also attended swimming educational course. In the beginning she used lifebuoy, and later on she managed swimming without support. She enjoys swimming and is not afraid of deep water. After the inclusion of my daughter into general PE classes I am sure it was a good decision. Everybody should move, whether healthy or handicapped. There are always exercises appropriate for everybody. (…) And dancing has always been so refreshing for her. Her classmates were kind and thus she could easily made friends. From the beginning she was quite nervous and repressed stress. Later on she improved her confidence

and managed her tension. I think that through dancing she was able to express her own feelings in another way and without hurting other children. (…) Currently my daughter enjoys good health and is satisfied. Even if she sometimes does not want to go to school to learn reading, writing, maths, she is always ready to go there because of PE lessons. When she comes across her PE teacher, she gives him a hug and says: the 4th lesson is PE. (…) In daily life she is more self-reliant, and I think it is a consequence of easier manipulation of her fingers and hands. (…) I also noticed that she does not repress her anxiety and other negative emotions so often as before. Sometimes she is able to find her own ways to express her negative or positive feelings."

## 5 Discussion

The objective of our intervention was to develop a set of exercises and movement activities for an inclusion of a girl with DS into general PE lessons. The results indicate that the intervention programme contributed to a significant improvement of the girl´s movement skills, especially in gymnastics, swimming and skiing. Later on her running technique was improved, her gait was smoother and more coordinated and her muscle tone was increased.

The most significant results were proven in the following:
- Motor skills and abilities of a girl were improved during her inclusion into general PE classes.
- The results of elementary motor skills indicate improvement of gross motor skills including sitting, walking, running and climbing stairs and fine motor skills helped her in self-service activities at school and in ordinary life (finer manipulation of fingers and hands).
- Improved health status – she is slim and in a good physical condition, because she practises recreational physical activities (cycling, walking, swimming and skiing) in her free time.
- Improvement of overall mental health, state of mind and outlook on life and satisfaction (spending her free time in a meaningful way).
- Successful inclusion of a girl with DS in a group of intact children. The selected and developed physical activities induced positive perception of others, including her self-perception.

These findings are supported by the following research studies. Cowley et al. (2010) claim that fitness exercises aimed at increasing the amount of low intensity physical activity in individuals with DS contributed to the improvement of their confidence and energy and made them feel good. The improvement in gross motor skills and

cognitive abilities after the intervention with physical activity respondents in 10–14 year old children with DS was proven in the research of Alesi et al. (2014) and Fernhall et al. (1989). Mendonca et al. (2011) proved positive potency of fitness programme and workout on gross motor skills, increasing the load support capacity and physical functions of limbs and fine bones in individuals with DS.

## 6 Conclusion

The paper presents the conclusions of a quality-based research performed in Slovak school. The objective was to develop and evaluate the set of exercises and physical activities for a girl with DS after her inclusion into general PE classes with intact children. She benefited from them in all the spheres of her development, health, mental, social and emotional.

As she practised recreational physical activities such as cycling a tricycle, swimming, walking and skiing, even in her free time, the girl´s health status and motor skills were affected in a positive way. The potency of the intervention was proven in the following:
- Motor skills and abilities:
  a) Gross motor skills: walking – her gait was smoother and more coordinated, her running technique improved, and she was able to climb the stairs without support after her muscle tone was increased.
  b) Fine motor skills: better manipulation of fingers and hands in self-service activities.
- Improved health status – she is not overweight and is in a good physical condition. She practises recreational physical activities in her free time such as cycling a tricycle, swimming, walking and skiing.
- Improved mental health, and life satisfaction.
- Better perception of her classmates.

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# Review on special education in USA higher schools

## (overview essay)

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*Abstract: Special education in higher schools is the main method to train the special education teachers. The paper is to introduce the developmental status, features and dilemma of special education in USA higher schools. Investigation shows that there are at least 237 colleges and universities with special education degree programs, where focuses on higher educational level, various major options, applied degree plans, strict requirements, networking and richly social support, etc. and is facing up to balance between "quality" and "quantity", "fairness" and "efficiency", and "specialty" and "career". It will have important meanings in promoting the reform and development of special education in other countries to review special education in USA higher schools.*

*Key words: special education; degree programs; teacher education for the students with special needs; higher schools; USA*

## 1  Preface

C. S. Berry created the first school to special education teacher in Michigan in 1914. Since that, it is about one hundred years for teacher education for the students with special needs in USA, which has formed complete system and accumulated some experiences.

At present, some researchers introduced the status and problems of early childhood special education in universities (Gallagher & Weiner, 1986, pp. 58–61); preparation of the effective initial deaf education teacher (Johnson, 2013), the rural teachers to serve young children with disabilities in Utah State University and University of Utah (Rule & Rowland, 1999), teacher for inclusive classrooms (Jordan, Schwartz & McGhie-Richmond, 2009), methods of pre-service and in-service training (Jiang &

Luo, 2011), modes of teacher education for the students with special needs (Lalvani, 2013; Brownell, Sindelar, Kiely & Danielson, 2010) and professional development of special education teacher (Li, 2013); compared the features, curricular system and mode of pre-service training for the special teachers in USA with PRC (Liu, 2010), and systems and requirements of qualification certificate of special teachers in USA with PRC (Gu, 2005; Deng, 2002). However, there are fewer literatures about special education degree programs in USA higher schools, this paper attempts to review its status and features in order to provide some experiences for special education in higher schools in other countries.

## 2  Status of special education in USA higher schools

In order to know the status of special education in USA higher schools, the author mainly investigates special education in 181 best universities with Faculty of Education, 201 best comprehensive universities and 178 best arts and sciences colleges in 2014[1]. Investigation shows us that there are at least 237 colleges and universities with special education degree programs and the following is about their overview, focus fields, training purposes, curricular system, training methods and evaluation system.

### 2.1  Overview

Investigation shows that there are 237 universities and colleges with special education, including 200 bachelor degrees, 214 master degrees (36 without bachelor degrees), 129 doctorate degrees (1 without bachelor and master degree) and 54 educational specialists; there are more colleges and universities in Middle Atlantic, Upper Mississippi (Great Lakes) and Pacific than Rocky Mountain state, New England and South-west (see table 1).

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**Table 1.** Number and distribution of special education major in USA higher schools

| Districts | Higher schools | Bachelor | Master | Doctorate | Specialist |
|---|---|---|---|---|---|
| New England | 14 | 11 | 12(3) | 5 | 2 |
| Middle Atlantic | 62 | 51 | 50(11) | 26 | 9 |
| South East | 21 | 19 | 20(2) | 16 | 5 |
| South | 21 | 19 | 20(2) | 12 | 9 |
| Mid-west | 22 | 19 | 22(3) | 12 | 6 |
| Upper Mississippi (Great Lakes) | 38 | 37 | 33(1) | 20 | 9 |
| Rocky Mountain state | 13 | 13 | 13 | 12 | 1 |
| Pacific | 29 | 15 | 28(13) | 16(1) | 12 |
| South-west | 17 | 16 | 16(1) | 10 | 1 |
| Total | 237 | 200 | 214(36) | 129(1) | 54 |

## 2.2 Focus fields

Investigation shows us that special education majors involve in more than 20 fields in 237 American universities. Among of them, besides "Special education", there are high frequencies in "Early childhood special education", "Elementary special education", "Mild /Moderate/Severe Disabilities", "Learning Disabilities", "Gifted Education", "Emotional and Behavioral Disorders" and "Autism Spectrum Disorders", etc. (see table 2). In some degree, graduate education focuses on "Special Education Leadership", "Early Intervention" and "Multicultural Special Education".

**Table 2.** Focus fields and frequencies of special education major in USA universities

| Educational level<br>Fields | Bachelor | Master | Doctor | Specialists | Total |
|---|---|---|---|---|---|
| (1) Special Education | 85 | 105 | 83 | 27 | 300 |
| (2) Early Childhood Special Education | 69 | 70 | 15 | 5 | 159 |
| (3) Elementary special Education | 42 | 20 | 1 | 0 | 63 |
| (4) Mild /Moderate/Severe Disabilities | 24 | 34 | 8 | 4 | 70 |
| (5) Learning Disabilities | 10 | 25 | 10 | 1 | 46 |
| (6) Gifted Education | 7 | 26 | 7 | 4 | 44 |
| (7) Emotional and Behavioral Disorders | 7 | 26 | 6 | 1 | 40 |
| (8) Autism Spectrum Disorders | 5 | 34 | 11 | 0 | 40 |
| (9) Deaf Ed or Hearing Impairment | 12 | 16 | 8 | 1 | 37 |
| (10) Early Intervention | 9 | 12 | 4 | 3 | 28 |
| (11) Communication Disorders | 12 | 7 | 4 | 0 | 23 |
| (12) Secondary Special Education | 10 | 11 | 2 | 0 | 23 |
| (13) Language Pathology | 8 | 10 | 1 | 3 | 22 |
| (14) Intellectual and Mental Disabilities | 5 | 10 | 5 | 0 | 20 |
| (15) Special Education Leadership | 0 | 9 | 7 | 4 | 20 |
| (16) Visual Impairment and Blind Education | 6 | 10 | 1 | 1 | 18 |
| (17) Inclusive Special Education | 5 | 6 | 1 | 0 | 12 |
| (18) Cognitive and Attention Deficit Disorders | 2 | 5 | 3 | 0 | 10 |
| (19) Special Education Assessment or Diagnosis | 0 | 6 | 2 | 0 | 8 |
| (20) Multicultural Special Education | 0 | 3 | 3 | 2 | 8 |
| (21) High or Low Incidence Disabilities | 1 | 4 | 2 | 0 | 7 |
| (22) Special Education Technology | 0 | 6 | 1 | 0 | 7 |
| (23) Special Education Psychology | 1 | 1 | 3 | 1 | 6 |

## 2.3  Training purposes

Purposes of special education usually involved in degree, curricular, student teaching and teacher education and are included in professional training programs or instruction manuals in USA universities. For example, student learning goals for bachelor of special education at The University of North Carolina in Greensboro includes demonstrating understanding of current federal and North Carolina law and policy related to special education and related services; explaining the basic educational and clinical concepts relative to definition, characteristics, identification, and diagnosis of students with mild to moderate disabilities; creating or revising program models for effective special education service delivery; using exemplary diagnostic, instructional, and therapeutic approaches for effectively and positively meeting the academic and social/emotional needs of students with mild to moderate disabilities; evaluating the effectiveness of students' special education programs. Master degree of special education at University of Missouri-Kansas City is to enhance the educated knowledge and skills in working with children and adolescents with exceptional learning needs and prepares them to teach students, to serve as advocates for children and their families, and to work collaboratively with colleagues. Doctoral program in special education at the University of Connecticut comprises a multifaceted experience to help students develop the knowledge, research, and leadership skills necessary to fulfill their professional goals. The primary goal of Randolph College's Teacher Education Program is to foster the development of highly qualified teachers and leaders for educational improvement.

## 2.4  Curricular system

About the curricular systems of special education in USA universities, there are mainly "vertical" and "horizontal" modes, the former directly introduces the curricula according to academic year, and the latter does that according to different classification standards. It is true that curricula are usually divided into different types in different USA higher schools.

Curricula for the bachelor in USA higher schools are mainly divided into two types such as "Required Special Education Courses" and "Required Additional Courses" in Nebraska Wesleyan University; three types such as "Professional Studies Core Courses", "Teacher Education Courses" and "Specialty Area Licensure Coursework in Special Education" in Salem College; five types such as "General Education Coursework", "Content Area Coursework", "Knowledge of the Learner and Learning Environment", "Methodology and Teaching" and "Additional Hours" in Louisiana Tech University; and six types such as "General Education Core Requirements", "General Education Marker Requirements", "Major Requirements",

"Teacher Licensure Requirements", "Second Academic Concentration Requirement" and "Electives" in The University of North Carolina at Greensboro.

Curricula for master in USA higher schools are mainly divided into two types such as "Core Courses" and "Directed Courses" in The University of Montana; three types such as "Core Curriculum", "Concentration Area" (*Required course and Electives*) and "Reflective Practice" in Eastern Mennonite University; and four types such as "a department core", "specialization core", "special education electives", and "two courses outside of the department" in The University of Texas at Austin; etc..

Curricula for doctor in USA higher schools are mainly divided into two types such as "Required Courses" and " Research Methodology" in University of Florida; four types such as "Required Reading coursework", "Coursework in Research", "Electives ", "Other Requirements" in University of Virginia; six types "Doctoral Seminars", "Research and Practice", "Research", "Specialty", "Specialty and Licensure" and "Dissertation" in University of Northern Colorado; and seven types such as "Specialization Core", "Content Core", "Research Core", "Professional Core", "Interdisciplinary Core", "Dissertation" and "Professional Activities Beyond Coursework" in The University of Texas at Austin; etc..

Curricula for specialist in USA higher schools are mainly divided into two types such as "Teach Well Core" and "Additional Courses" in University of Florida; and three types such as "Reading Core Example Courses ", "Electives ", and "Thesis Course" in University of Virginia; etc..

## 2.5 Training Methods

With non-directional training mode for special education teacher in USA higher schools, the students will choose the major according to their interests at the end of sophomore year and special education students have more solid professional thinking (Liu, 2010, pp. 44). At the same time, higher schools usually make full use of quality resources from campus, Professional Development Schools (PDS) and community, and train high-quality special education teacher by means of group discussions, classroom debate, self-study out of school, field experiences and online learning, etc.. For example, Master of Arts in Learning Disabilities or Emotional/Behavioral Disorders in Furman College is designed to add endorsement in a specific area of special education for certified teachers, and field experiences and a final practice enable the students to apply their knowledge and skills in a real-world setting; students enrolled the bachelor and master program of special education at Edgewood College will have the opportunity to work in the Cutting Edge, which gives students in our graduate special education program the opportunity to teach individuals with special needs in collaboration with their college professors; and some courses may be

available as on-line, web-based courses about the Autism Collaborative Endorsement (ACE) Program for master of special education and may be appealing for graduate students in remote locations who want to further their knowledge in the area of Autism in Central Michigan University.

## 2.6  Evaluation system

Professional college evaluation system is attached to USA higher schools and special education evaluation is mainly included in requirements for admissions application, courses, internships, degree and teacher qualifications, etc.. For example, to be admitted directly into a teacher education program for Bachelor of Science in Education in Special Education in Kent State University, new freshmen have a 2.75 high school GPA and 16 units of college preparatory curriculum or a 21 ACT or 980 SAT score; graduation requires minimum 123–131 credit hours (depending on concentration), minimum 2.750 cumulative and a 3.000 major GPA; the candidates seeking Ohio licensure are required to pass specific assessments in order to apply for licensure and students in the Deaf Education and ASL/English Interpreting concentrations must also pass the Sign Language Proficiency Interview (SLPI) at the intermediate level for graduation. Evaluation of Master for learning disabilities teacher consultant endorsement (LDT-C) in Monmouth University includes Admission (Letters of recommendation, Essay, 2.75 GPA), Admission to Practicum (3.0 GPA, Lesson plans, Unit plans, Teacher Work Sample, Technology assessment, Course assessments, Case Studies), Program Completion (Comprehensive exams, Capstone assessment projects, Professional Binder, Supervised Internships, Professional Development Plans, Case Studies ) and Post-Graduate Assessment (Exit Survey, Employer Survey, Candidate Survey ). Doctoral students in New Mexico State University need doctoral qualifying examination for application admission, learning professional practice core and research core courses, sending research project/evaluation project/ continuing education project/ curriculum development project, and annual review/ scholarly development review/ comprehensive examination, and providing 20–30 minute overview about dissertation. Evaluation for student teaching in University of Wisconsin-Madison includes professionalism, communication, assessment, special education evaluation and individualized planning, instructional planning, instructional presentations and classroom management.

## 3 Features of special education in USA higher schools

Looking through the development status of special education major in USA universities, the author believes it has the following characteristics.

**Higher level**
"High-level" means special education in USA higher schools has developed faster and formed complete and higher-levels system. On one hand, it has developed very fast. There were 40 colleges and universities with special education to train the teacher for the children with mental impairments in 1957; however, there are more than 230 colleges and universities now. On the other hand, it has formed complete and higher-levels system. At present, many USA universities including some without normal education have set up a special education degree programs, and formed multiple levels of degree systems with associate bachelor, bachelor, master, doctor and specialist; at the same time, there are more and more colleges and universities with bachelor and graduate education that has developed very quickly. Among 237 colleges and universities, there are more master degrees than bachelors and percentage of master is 89.9%, doctor 54.4%and education specialist 22.8%.

**Various options**
"Various options" means non-directional pattern of teacher training with wide professional fields, rich curriculum resources, and diverse career options in USA higher schools. On one hand, there are the wider fields and diverse career options. For example, bachelor and master in Kent State University focus "Deaf Education", "ASL/English Interpreting", "Mild/Moderate Language Arts and Reading", "Mild/Moderate Social Studies and Reading", "Mild/Moderate Mathematics and Reading" and "Moderate/Intensive Educational Needs"; and may work in public and private educational institutions, individual and social assistance agencies or residential facilities, or in homebound or hospital environments. On the one hand, there are richer curricular resources. Special education in USA higher schools has diverse general courses, innovative and practical educational courses, novel professional curriculum, and rich practice (Liu, 2010, pp. 46–51), which facilitate the students to choose, learn and grow independently.

**Applied degree plan**
"Applied degree plan" means there are clear purposes, richer courses and varied methods of special education programs in USA universities which focus on learning and career guidance. On one hand, many colleges and universities have developed a special education professional training programs with specific educational goals, professional fields, admission requirements, curricular system, graduation

requirements, and career options. For example, master program in University of Houston shows us "Is this program for me", "What will I learn" and "What can I do with my degree". On the other hand, many colleges and universities with a very detailed degree programs and teacher education instruction manuals tell the students "What to do", "How to do" and "What to do in the future". For example, "Handbook for Doctoral Students in the Special Education and Communication Disorders Department" in New Mexico State University includes "Overview", "The doctoral application and admission process", "Program requirements" (courses requirements, doctoral projects, the scholarships, evaluation), and "Dissertation", etc.; "Teacher Education Handbook" in St. Lawrence University shows us "Routes to Initial and Professional Teaching Certification", "New York State Standards for Teaching Education", "The Professional Semester" and "Evaluation Process for Student Teachers", etc.

**Strict requirements**

"Strict requirements" refers to the fact that USA colleges and universities have not only national and local professional standards for special education teacher, but also put forward practical implementation of the program according to practice. On one hand, the US government attaches great importance to improvement of special education teachers' professional standards. The Council For Special Children (CEC) enacted "What Every Special Educator Must Know: The International Standards for the Preparation and Certification of Special Education Teachers" (first ed.) in 1995, published "What Every Special Educator Must Know: Ethics, Standards, and Guidelines" (sixth ed.) in 2009 (Du & Liu, 2014), and "Special Education Professional Ethical Principles" in 2010 and "CEC Special Educator Preparation Standards" in 2012 (Wang & Feng, 2014). On the other hand, USA colleges and universities carefully implement special education teachers' professional standards by means of training programs, teacher education or degree manuals. For example, "M. S. Ed Learning Disabilities Teacher Consultant Endorsement: LDT-C" in Monmouth University tells us "CEC Special Education Professional Standards" and beginning special educators should master the "CEC Common Core Knowledge and Skills" and the appropriate "CEC Specialty Area(s) Knowledge and Skills"; and "Teacher Training Guidebook" in Massachusetts College of Liberal Arts introduces six professional standards for Massachusetts's Teacher and four professional requirements of early special education.

**Internetworking**

"Internetworking" means that USA colleges and universities introduce special education and enhance the effectiveness of special education teacher training by means of Internet. On one hand, the colleges and universities have attached great importance

to constructing and updating of network resources. Learners and researchers can easily search richly professional network resources and get professional information of special education by means of "Teacher Education Handbook", "Student Teaching Manual", "Degree Handbook", which has played a great role in introducing and propagandizing their special education majors. On the other hand, the colleges and universities have attached great importance to the network instruction. Learners can learn professional knowledge and skills of special education and apply for the appropriate degree through online courses, online learning, distance education, etc.. For example, there is online learning for bachelor and master of special education (autism) in Kent State University; online learning for specialist of early childhood special education in University of Colorado Denver; and online learning for master, doctoral and specialist of special education in Alabama University; etc.

**Richly social support**

"Richly social support" means there is strong social support for special education degree programs in USA universities. The US government has improved special education teacher management system and provides a powerful system and financial support for special education degree programs in higher schools. At present, USA has set up more complete special education teacher standards, teacher certification system, the initial teacher education system, pre-service teacher training mechanisms, etc. (Li, 2012); at the same time, the government has increased funding step by step, and invested $ 12.7 billion for special education to improve education and early intervention of children with disabilities and adolescents with 0–21 years, and accounting for 18.2 percent of the education budget in 2013 (Ou & Wang, 2013). The colleges and universities have actively set up the support system of higher education. For example, "Higher Education Support Center" has been set up in Syracuse University in order to develop high-quality inclusive teacher preparation program, participate and support the professional development of experimental schools, and promote the communication between the state Department of Education and higher education institutions[2]; nine public universities have established cooperation relationship with local educational institutions about professional development in Florida (Jiang & Luo, 2011); and there are the other relative programs such as "Innovative Special Education Preparation "(ISEP), "The Santa Cruz New Teacher Project" (SCNTP) and "Beginning Teacher Induction Programs of Milwaukee" (IPPSET ) (Chen, 2005); etc.

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[2]  Retrieved from http://www2.ed.gov/about/overview/budget/budget13/summary/appendis1.pdf.

## 4  Dilemmas of special education in USA higher schools

In no doubt, special education degree programs in USA higher schools have entered into the developed countries in the world. However, special education teachers still lack of enough pre-service preparation and have a serious loss in USA, and special education degree programs in USA higher schools are still facing up to the dilemmas of balancing between "quality" and "quantity", "fairness" and "efficiency", "specialty" and "career".

**Quality and quantity**

"Quality" and "quantity" are the important evaluation standards for special education in higher schools. The former pursues in developing professional connotation and characteristics, and enhancing the professional and overall quality of the educated; and the latter focused on the change in scale of higher schools and, the number of the educated. Currently, the value orientations and goals of the USA policies on special education are no longer just concerned about "quantity" of special education teachers and training systems of special education teachers, rather than "quality" of special education teachers (Li, 2012); special education in colleges and universities have paid great attention to not only increasing "quantity", but also improving "quality". However, in the face of "Zero Reject" of special education and the practical needs of inclusive special education, "How to deal with the dilemma between 'quality' and 'quantity'?" or "How to train both the 'high-quality' and 'enough-quantity' of inclusive education teacher?" (Lalvani, 2013) is one of difficulties or challenges that special education in higher schools needs to cope with.

**Fairness and efficiency**

"Fairness" and "efficiency" are another important evaluation standards of special education in higher schools. The former refers to the "scope" of the educated for special education degree programs, and highlights "all is equal"; and the latter refers to professional effectiveness and social influences, and pursues in "value should be added". Currently, "equal opportunity", "full participation", "Independent Living", "Self-sufficiency" are considered as the basic goal of special education and core indicators of its effectiveness in the USA (Turnbull, Tumbull & Wehmeyer, 2010, pp. 26); college and universities focus on humanistic concern and have established "Special Education Management Office" responsible for special education management and service objects (Cai, Wang, Zhu & Dan, 2010). However, with the increasing number of children with special needs and a serious shortage of special education teachers (Zan & Jiang, 2008), "How to coordinate the conflict between 'fairness' and 'efficiency'?" or "How to train special education teachers with theoretical knowledge and practical ability? " (Brownell, Sindelar, Kiely & Danielson, 2010), is

still one of the problems that special education in USA higher schools needs to cope with.

**Specialty and career**

"Specialty" and "career" are another important evaluation standards of special education in higher schools. The former emphasizes professional academic standards and norms and focuses on professionalism and academic value; and the latter emphasized professional social rules and identity, and focuses on the application and practical value. Currently, the USA has established more complete systems of special education and more perfect professional standards for special education teachers; and colleges and universities attach great importance to the implementation of professional standards for special education teachers. However, faced with practical problems such as "too strict regulations", "heavy workload", "shortage of adequate support" for special education and "serious loss", "shortage of quantity", "low quality" and "structural imbalance" of special education teachers (Yi & Xiong, 2013; Qi & Chen, 2013), "How to deal with relationship between 'professional standards' and 'career identity'?" or "how to train special education teacher with both "professionalism" and effective adaption to realistic environment?" is still one of the problems that special education in USA higher schools needs to solve.

## 5 Conclusion

In short, special education in USA colleges and universities has developed for more than 100 years, and not only entered into the leading ranks of the world, but also accumulated a lot of experience and formed its characteristics. Between the USA and the developing countries, including the PRC, there are great gaps in educational scale, educational levels, network resources and overall quality of special education, etc. Therefore, it is very imperative to learn from special education in USA higher schools.

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# Intellectually Gifted Children With Dyslexia

PORTEŠOVÁ, Š. *Rozumově nadané děti s dyslexií*. Prague: Portál, 2011.

## (book review)

## Reviewed by Jana Jičínská

The following review is dedicated to the extensive but very often underrated topic of children with so called dual exceptionality. The publication is based on the research work of psychologist doc. Mgr. Šárka Portešová, Ph.D., who devotes herself to this theme in the field of developmental psychology. Every year there is a large number of publications on education of children and youth with special needs which focus on various areas – those, for instance, include re-education, compensation, individual education plan and various documents relating to diagnostic, advisory and corrective activities designed both for educators and parents and other professionals. With respect to the area of handicapped children there is disproportionally less literature which could adequately saturate the current needs of this heterogeneous group of pupils and students with diverse potential of abilities and skills but simultaneously with uncaught limits which impede the enjoyment of school as well as later academic success compared to the others who do not have such handicaps. The publication monitors the given area relatively well, providing very interesting practical insights and inspirations documented with rich graphic material – e.g. using images, charts and graphs. In view of the fact that the author works as a developmental psychologist, it is obvious from each approach that she is in contact with the reality of today's school and is able to respond adequately and reason the contemporary needs of parents and children. The book contains a large number of case reports documenting various limits and difficulties of pupils, however, simultaneously we can find here instructions and recommendations or suggestions for further development of these topics, or procedures for school and consulting practice. The content of the book is logically structured; the work evidences coherence and integrity. The author very well combines practical and theoretical level, smoothly moving from analysis to synthesis. The publication draws on sources of English provenance, making it more comprehensive and more plastic, thus giving the readers the opportunity to compare

approaches in the Czech Republic and abroad. The division of the book corresponds to the logical structure of topics and their links. The first chapter deals with the scientific research of talents and various conception of talent, the conception of IQ and its limits in the assessment of outstanding abilities of pupils. The second chapter introduces briefly the legislation of the Czech Republic and the current view of those gifted and the "dual exceptionality". The third chapter offers the perspective that particularly attracts psychologists and special educators. It discusses the issue of identification of the gifted handicapped pupil and what are the possibilities of care for such individuals. In view of the fact that the theme of identification is quite demanding, it is necessary not only for parents of the gifted children and teachers but also for other people or professionals who come into contact with gifted individuals whose abilities are disguised with handicaps to cooperate in assessing their interests, in which their abilities are masked by handicaps. The fourth chapter reflects the common myths arising in connection with those gifted having the learning disabilities. The fifth chapter focuses on the particularities of the individual plan and its aspects for gifted children with dyslexia. In the sixth chapter, the author attempts to bring a typology of gifted children with dyslexia, their relationship between the talent and disorder. The seventh till twelfth chapters gradually reflect psychological and special pedagogy approaches and needs of pupils with dual exceptionality. They inform about the emotional problems of gifted children and the ways they express their needs, whereas the author demonstrates numerous case reports and evidences of pupils and their parents. It is important to mention also the fact that the failure of pupils is not always the fault of one party, but a big role is very often played by all engaged in the pupils' education. It should also be noted that the talent could also bring some social problems – exclusion, lack of understanding, a sense of otherness. Very often these students – especially girls – long to be average, so that their talents are not seen, in double exceptionality the fear of failure is evident; therefore they need psychological support from specialists, but the most from their parents. The publication therefore offers an infinite number of inspirations and perspectives that could dramatically help the active screening of these individuals as the potential we have in them can become a valuable source of scientific and technical progress. These individuals may be a driving moment of science, culture and technology. The excessive propensity for average and disregarding for this issue brings up a lot of damage – not only indifference towards the needs of these pupils, but also the loss of valuable skills of these highly motivated, yet underrated pupils. We believe that this book has brought new knowledge thus broadening the spectrum of views of the issue of children with dyslexia. We recommend it to everyone interested in pedagogy, psychology, social work, special education and also medical sciences. However, it can also bring new stimuli to all parents with gifted children or children with handicap.

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# The what and how of community based rehabilitation (CBR) in the African decade of persons with disabilities

ABOBIEWE, Theo. The what and how of community based rehabilitation (CBR) in the African decade of persons with disabilities. In E. D. OZOJI; I. A. KOLO & T. A. AJOBIEWE (Eds*) Contemporary issues in guidance, counselling and special education*. Ibadan-Nigeria: Glory-Land Publishing Company, 2012.

## (book review)

### Reviewed by James E. Olayi

The paper is an expert piece of information bothering on community based rehabilitation practice as an option of service to persons with disabilities in and around the African continent. The writer presented a vivid explanation of the meaning and concept of community based rehabilitation looking at the persons and recipients point of view by highlighting some feature of operating community service and emphasising that the practice is less expensive but more effective in reaching out to beneficiaries.

For ease of understanding of readers, the writer looked at studies and works by other educators which aimed at modifying behaviours and lives of exceptional children, most of which are focused on handicapped children managing essentially school based system and with very few attempting to meet the needs of the clients when removed out of institutional environments. Stressing that this is where the disabled individual will finally come to live eventually in a community situation. The paper did not fail to recognise the role of homes and/or boarding houses where itinerant social workers and house parents care for and render desired services to inmates, as well as observing that although these are still very few, they are a departure from the strictly regimental institutions.

Examining the question of apathy against rehabilitation, the author noted that this may be due to the fact that most of the countries rate special needs attention to handicapped children very low on their priorities. The writer posited that as long as this attitude prevails, there can be no appreciable achievements by way of widespread community attention and participation in this project. Another reason

of hindrance advanced in this paper is the lack of skilled and competent personnel and infrastructure or both.

Because of the African decade of persons with disabilities (1999–2009), the author of this article has taken time to present in-depth information of the emergence of the African decade of persons with disabilities and the role of African Heads of state and Governments to the declaration of this decade and the commitment of members. The declaration and later adoption of this decade was in the words of the writer "The result of the recommendations of the Labour and Social Affairs Commission of the OAU now AU". Again, the writer pointed out that the goal of the decade is full participation, equality and empowerment of people with disabilities in Africa, with the objectives of formulating or reformulating national policies and programmes that encourages the full participation of PWDS in social and economic development. To create or reinforce National disability coordination committees and ensure effective representation of disabled persons and their organizations. To support community based service delivery in collaboration with International Development Agencies and Organizations. To promote more efforts that encouraged positive attitudes towards children, youth, women and adults with disabilities and the implementation of measures that would ensure rehabilitation access, education, training and employment as well as to cultural and sport activities and access to the physical environment. To develop programmes that would alleviate poverty among people with disabilities and their families among others.

The paper also highlighted the strategies for the implementation of the decade to rests on the shoulders of Government, Ministries and departments, DPOs, Specialized agencies of OAU or AU, Regional economic communities, the UN and its specialized agencies, Organization of employees and workers, NGOs, Religious organizations, Individuals committed to the full participation, equality and empowerment of people with disabilities in the African continent.

In understanding the concept and operations of community based rehabilitation and services, the writer urged readers to do so by considering the various schools of thought about it. This view point according to the writer originated from some specialized agencies of the United Nations notably the ILO, UNESCO and WHO. Community Based Rehabilitation (CBR) represents an effort to entrust members of the immediate family of a disabled child and the community with the task to perform a rehabilitation process so simplified in a way that those responsible can carry out therapeutic exercises and produce and use simple aids and services. Other details include planning CBR, programme objectives of CBR, programme ideology, distinguishing features of CBR, factors and consideration when planning CBR, strategies for implement, selection of staff, training of staff and volunteers, training materials, implementing the programme and evaluation of the programme.

This knowledgeable and rich piece of information was concluded by the author by stating that CBR is important for economic viability and the validity of the socio-cultural aspirations of persons with disabilities in Africa in particular and the world in general. Therefore, for more details, I recommend to all scholars of special needs education to obtain and read the article.

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# Information for authors

## Basic information about the JEP

*Journal of Exceptional People (JEP)* should be based on 2 times a year publishing period in both electronic and traditional – printed form. To guarantee professional standards of the Journal we have applied to the front of special needs teachers, psychologists, therapists and other professionals in the U.S., Finland, Spain, Slovakia, Hungary, China, Russia, Poland and other countries. Above mentioned scientific journal aspires to be registered into the international database of impacted periodicals (Journal Citation Reports).

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- That in the review process the author does not know the identity of the reviewer, and vice versa
- The reviewer and contributor does not come from the same organization or institution
- That if it is proven that there were some editorial or author's errors in the published article, this fact will be published in the next issue

Authors agree to the following:
- That their presented texts are original works
- That they state the references in accordance to standard specifications for citing sources (standards ISO 690, ISO 690-2 or the Publication Manual of the American Psychological Association APA)

**The criterion relating to the quality of articles**

Content criteria:
- Does the authors state the current state of knowledge?
- Is the chosen topic a new one?
- Is the article comprehensive enough?
- Did the author use appropriate terminology?
- Are the sample and the methods used in scientific papers adequately described?
- Are the quantitative or qualitative methodology and interpretation of results reliable?
- Does the text have clear conclusions?

Formal criteria:
- Did the author comply with the standard division of the article (abstracts, keywords, literature, …)
- Is the text clearly divided into chapters?
- Are the tables and graphs clear and understandable?
- Is the text not too long or too short?
- Is the list of used citation sources (literature) not disproportionately large?

**Recommendations – Editors conclusions**

- Text will be published
- Text will be published after minor modifications
- Text will be published after reworking
- Text will be reviewed again
- Text will not be published