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Dear readers and colleagues,

The first issue of the journal *Social Pathology and Prevention* of 2021 comes to you in a new monothematic format, which emphasizes therapeutic intervention activities associated with the multisensory method known as Snoezelen and research project Support of the Snoezelen concept and its integration into university education. With this edition, we aim to draw attention to the new innovative possibilities offered in the context of prevention and real solutions to situations related to the marginalisation of different social groups, in this case people with disabilities. Snoezelen rooms are already part of many social services both in the Czech Republic and abroad, and their aim is not only to provide relaxation and reduce stress, but also to systematically work on and develop the personality of clients. Prevention activities focus on social misbehaviour and ensuring better quality of life for people with health or social disabilities, particular (but not exclusively) in institutional care.

The first published text, a comparative study written by Czech authors J. Viktorin and J. Pipeková, consists of an analysis of 17 diploma theses which focus on the educational possibilities of using the Snoezelen concept in children and pupils with moderate, severe, and profound intellectual disabilities, multiple disabilities, autism spectrum disorder, and pupils with hearing impairment. The unequivocal results of this literature review clearly demonstrate the sustainability and high level of use of Snoezelen in the education of pupils with severe disabilities in special schools and in the prevention of problem and risky behaviour.

The second text, a methodological study, relates to the field of diagnostics. The authors M. J. Cid, R. Ribes, and K. Janků present a practical tool for professionals who work in care services (24-hour services) with people with types of dependency and/or developmental disability such as dementia and/or Alzheimer's, intellectual disabilities, autism spectrum disorders etc. They set out to describe how to provide a pleasant and enjoyable environment and daily activities that accord with clients' capabilities; for this, it is important to start with the most reliable knowledge available of the sensory capacities and sensory preferences of each client.

The third text, a theoretical study by A. Smrokowska–Reichmann, concerns commonalities between the Snoezelen method and therapeutic storytelling (fairy tale therapy). The author's aim is to highlight the differences of practising fairy tale therapy within the Snoezelen room (as part of bibliotherapy) and the synergic effects this produces. The article analyses the theoretical and practical aspects of conducting fairy tale therapy in a Snoezelen room both with children and with adults.

The first of our two examples of good practice is centred on evaluating the benefits of Snoezelen stimulation in an elderly patient with advanced dementia. The authors R. Ribes, N. Llamas, and M.J. Cid present a pretest-posttest design involving an intervention consisting of one weekly Snoezelen session over a five-week period. Their results indicate immediate and short-term benefits of Snoezelen in terms of connection with the environment and behavioural adjustment in the patient.

The second example of good practice provides insight into the implementation of music therapy activities within holistic music therapy. The author I.J. Savková provides theoretical information about holistic music therapy and then focuses on the application of music therapy in the environment of a special primary school with a target group of students with combined physical and severe mental disability. Part of the article is a description and evaluation of a project involving holistic music therapy for pupils with manifestations of problematic and risky behaviour in a primary school in the Czech town of Bohumín.

In a highly interesting report, E. Zezulková presents a project implemented by the Ministry of Education and Science – *A Practical Model of Primary Prevention of Risky Behaviour in Schools (PRCH-IP-organization_0040/2021)*, which is in line with the long-term concept of the development of scientific and research activities of the Institute of Special Education, newly established at the Faculty of Public Policies in Opava.

And in the final part of our current issue, readers can find a review by M. Kolaříková of the book: *Rodina a její paměť v nás ve světle třígeneračních vyprávění* (2018).

We are very pleased to inform all authors, colleagues, professionals, and readers that from the 2021/1 issue, the Journal of Social Pathology and Prevention will be registered in the EBSCO International Database.

We thank you for your support and look forward to further cooperation with you!

Kateřina Janků & the Editorial Team

ARTICLES

POSITIVE IMPACT OF THE SNOEZELEN CONCEPT ON CHILDREN AND PUPILS WITH HEALTH DISABILITIES

**Jarmila Pipeková
Jan Viktorin**

Abstract

The literature review analyses 17 diploma theses which focus on the educational possibilities of using the Snoezelen concept in children and pupils with moderate, severe, and profound intellectual disabilities, multiple disabilities, autism spectrum disorder, and pupils with hearing impairment. Snoezelen is the name given to approaches, strategies, and special pedagogical support, implemented through various methods, techniques, and means to activate development, stimulate interest, motivate cognition, and mediate personal experience in people of different ages, but especially in children and pupils with multiple disabilities of different aetiology or causality. The results of the literature review clearly demonstrate the sustainability and high level of use of the Snoezelen concept in the education of pupils with severe disabilities in special schools, under the guidance of fully competent special educators during the period of compulsory education.

Keywords

literature review, Snoezelen, pupil with intellectual disability, pupil with autism spectrum disorder, pupil with multiple disabilities, special primary school

Introduction

Snoezelen is applicable to all target groups, whether in terms of age or ability. Since it does not require intellectual or other abilities, it is also suitable for children with severe disabilities. Snoezelen was primarily intended for these individuals. At present, it can benefit individuals with various types of disabilities, behavioural disorders, psychiatric diagnoses, dementia, traumatic brain injuries, chronic pain, individuals in palliative care, and able-bodied populations. Snoezelen can be defined as the induction of well-being and feelings of satisfaction through multisensory stimulation. The word Snoezelen is a portmanteau of two Dutch words: "snuffelen" (sniff) and "doezelen"

(nap). The combination of these words completely and accurately captures the essence of the concept, which, on the one hand, helps subjects to relax and unwind thanks to the pleasant and calm atmosphere of its environment, and, on the other hand, supports activity and exploration, thanks to a stimulating and motivating environment. Snoezelen is a dynamic set of mental characteristics, based on a persistent sensitive relationship between the participant, a qualified guide, and a controlled environment, in which many possibilities for sensory stimulation are provided (Janků, 2018; Mertens, 2003; Oriščíková & Hřčová, 2010).

A multisensory room should be a place where the individual has enough time and space to explore and interact with objects. If at all possible, they should have choice. Space, time, and the right to choose are related to the basic principle of Snoezelen: "nothing is necessary, everything is allowed". Mediation of mainly positive experiences and positive feedback is important. In a multisensory room, everything is set up so that it is possible to regulate the number and intensity of stimuli, and to adapt the environment according to the ability of an individual with a severe disability to process sensory stimuli. Individual stimuli can be intense enough for an individual with a severe disability to register and pay attention to, or alternatively, only gentle stimulation may be provided so that the individual's sensory tolerance is not exceeded should he or she respond hypersensitively to stimuli. It is advisable to choose a smaller number of stimuli (perhaps only one or two), with respect to the specifics of sensory perception of individuals with severe disabilities; while there may not be many sensory experiences, they may be more intense (Filatova, 2014; Švarcová, 2011; Verheul, 2008).

Individuals receive feedback on their competence to manipulate objects actively and independently in the room (in the form of sound or light), and are thus able to control and monitor their environment, which contributes to their development. Snoezelen is not just a means of relaxation and gaining new experiences. In multisensory rooms, it is possible to target the development of individual skills and abilities: perceptual, motor, cognitive, communication, and social. In addition, it also serves to eliminate inappropriate behaviour, and build a relationship with the person supervising Snoezelen. However, the highest and most important goal of Snoezelen is to create a feeling of well-being and security for users. When applying Snoezelen, one of four approaches can be selected. Snoezelen can be used as a leisure activity in which no specific goals are pursued and the Snoezelen session has a free flow. Currently, Snoezelen is more often used as a therapeutically-oriented approach with a certain goal, and, in the environment of Czech special schools, as a targeted pedagogical activity with a given educational goal. In these cases, the units should be thought out in advance, they should pursue a definite goal (in connection with the support of overall development), and the person working in the room should know the efficacy of individual aids and components, and should select and use them purposefully (Hulsegge & Verheul, 1997; Janků, 2010; Mertens, 2005).

The multisensory environment/room can be equipped with a wide range of objects that are commonly used, or are intended primarily, for Snoezelen. It can be focused on stimulating one or two senses, or it can be equipped to stimulate all the senses. There are different variations of multisensory rooms or environments. The most universal

and most used is the white room; however, other types of environment can be chosen, depending on the target group, their needs, and goals that we want to meet. In the Czech context, four types of environment are most often used: white, dark, and soft-play rooms, complemented by the so-called 'dream' or thematic room – an interesting element of support for individuals with severe disabilities and multiple disabilities (Orieščiková, 2015). Pagliano (2001) describes 12 embodiments of a multisensory environment. In addition to those already mentioned, these include a grey room, and other types of environments and zones, e.g., sound spaces, interactive zones, water zones, inclusive zones, virtual environments, social spaces, and pluralistic environments. He also refers to a portable environment that can be disassembled and packed up. This environment can, to some extent, be compared to mobile Snoezelen. In his more recent work, Pagliano (2012) adds other environments, such as olfactory, taste, and interoceptive spaces (an environment focused on the stimulation of interceptors, i.e., the vestibular apparatus and proprioception). The sound space is divided into two types, according to the intensity of the sounds (sharper sounds vs. more muted sounds).

The vestibular and proprioceptive system can be stimulated by a waterbed (it is still the basic element of many rooms), positioning bags, swings, or a pool filled with balls (it can also be backlit, which enhances the overall stimulation). These components are a source of stimuli to the body and are indispensable for individuals with severe and multiple disabilities. They allow us to gain experience of our own body, help us to understand it, and build a body scheme. In addition, the waterbed helps to relax muscles and encourages some degree of activity, as even the slightest movement on the bed will cause a movement effect. Different toys or objects of different structure, texture, shape, size, or weight can be used to stimulate touch. Another option is to install a tactile wall or panel, or a handling panel. Various odours are used to stimulate the sense of smell, which are used in a targeted way to achieve a certain state (relaxation, activation, support of attention, breathing, etc.) or to complete the overall atmosphere of the room. Sounds and music are indispensable. Music as a supporting or finishing element should meet certain criteria. Individuals in the room not only perceive the sounds (through music, toys, or simple instruments), but should also be guided to produce their own sounds. It is advisable to combine sounds with light or vibration. Visual stimuli are provided by the lighting of the room itself, which can be chosen in a targeted manner. Components may include bubble cylinders, optical fibres, projectors with rotating thematic patterns or projection of liquid oil paints, a mirror ball with a coloured reflector, etc. A very intense stimulus is mediated by UV light and UV reactive (phosphorescent) objects, which create a strong contrast to the rest of the environment, and stimulate individuals to activity, helping them utilize their residual visual abilities and supporting elementary visual abilities, such as localization, fixation, or tracking (Filatova & Janků, 2011; Schwanecke, 2004; Vančová, 2010).

The rooms are (and should be) interactive in both social and technical senses; individuals with a severe disability are not limited to merely passively monitoring and receiving various stimuli but can evoke them themselves and get feedback on their own activity. Classic components, such as bubble cylinders or optical fibres, can be connected

by special controllers with large buttons. With them, individuals can change the colour of fibres or cylinders. The control is simple and does not require much effort on the part of the individual. Thanks to these controls, it is possible for individuals with severe disabilities to be able to intervene in the arrangement of the environment actively and independently and evoke popular or preferred stimuli. In addition, interactive aids and interactive panels can be installed in the room, which respond to touch (for example, the pressing of a button) by turning on a light or changing colour, or by changing the light pattern. Verbal communication, or vocalization, can be supported by installation of components that respond to sound, e.g., by changing colour. Aids that respond to slight movement are also in place. In addition to visual feedback, the individual's activity can also prompt various sounds, music, smells, and vibrations, or activate a fan to allow the air flow to act on them. It is important that the room is safe with respect to movement and handling of objects, and that there is enough space in it to sit or lie down. It should be pleasant and, at the same time, motivate individuals to activity and cognition (Davies, 2012; Fowler, 2008; Opatřilová, 2013).

Methodology

The literature review has become the cornerstone of any relevant research in the field of special education. It is a method that is essential for the development of science in inclusive and special education. The importance of the literature review is given by the fact that no current research at any level can be undertaken without a thorough analysis and mapping of what has already been discovered in the research area, and how previous researchers have worked. Through a literature review, we can orient ourselves in the research area that we want to build on in our work (Bearman, Smith, Carbone, Slade, Baik, Hughes-Warrington, & Neumann, 2012). A form of traditional (narrative) review was chosen for this literature review, which summarizes a larger set of studies on a given topic over a period. The study is based on carefully defined perspectives or selected research questions. It describes the findings from previous research, summarizes them, and identifies inconsistencies in the views of the authors and in the presented results of the authors. Thus, the review may contain more general recommendations and conclusions (Grant & Booth, 2009).

The presented literature review reflects the question of the positive impact of the Snoezelen concept on children and pupils with health disabilities. To select studies suitable for analysis, we set two basic thematic criteria: individuals with disabilities, and the Snoezelen concept. We tried to grasp the chosen topic for the overview study comprehensively. By analysing and then synthesizing the knowledge, we decided to focus on the possibilities of educational use of the Snoezelen concept in children and pupils with moderate, severe, and profound intellectual disabilities, children and pupils with multiple disabilities, autism spectrum disorders, and hearing impairment.

For this purpose, according to the selected parameters, we performed a selection and subsequent analysis of 17 diploma theses of Masaryk University graduates which deal with our chosen topic. The collection and study of diploma theses was carried

out at the beginning of 2021. We searched for diploma theses for the literature review in the archive of final theses on the university's web portal. We concentrated on thematically focused diploma theses in the period defined by the years 2006–2021. Based on the established criteria for the selection of suitable diploma theses, and according to the performed analysis, we synthesized the findings from relevant diploma theses into a literature review. We aimed to analyse individual selected diploma theses in a systematic review, then to give their brief characteristics, their contribution to theory and practice and, in general, to integrate knowledge on the topic of the positive impact of the Snoezelen concept on children and pupils with disabilities. Table 1 provides a general overview of the studies selected for this review.

Table 1 Overview of the analysed studies

Author, year	Title	Research methods	Research sample	Research goal
Pešatová, M., 2021	Development of Sensory Perception in the Snoezelen Room at a Special Primary School	Qualitative research using techniques: participatory observation (records on the assessment scale), analysis of available documents, case studies	Four pupils of a special primary school (two girls and two boys), aged 8-14 years	To find out whether sensory perception of selected pupils develops during regular stays in the Snoezelen multisensory room
Piknerová, T., 2020	The Influence of the Snoezelen Concept on the Social Interaction of Pupils with Multiple Disabilities	Qualitative research using techniques: direct participatory observation (notes from individual lessons in Snoezelen), semi-structured interviews with pupils' parents and teachers, study of documents, case studies	Five pupils of a special primary school with multiple disabilities (four boys and one girl), aged 8-16 years	To find out what the Snoezelen concept contributes to the social interaction between a pupil with multiple disabilities and his/her surroundings (carer, family, teachers, peers)

<p>Cmajdálková, D., 2019</p>	<p>Structured Teaching in a Snoezelen Environment at a Special Primary School</p>	<p>Qualitative research using techniques: case studies, analysis of documentation (written notes, photographs, video recordings), observation, interviews</p>	<p>Seven pupils of a special primary school (three girls and four boys), aged 9-15 years</p>	<p>To find out how structured teaching in the Snoezelen environment affects pupils with different types of disabilities in a special primary school</p>
<p>Krchová, D., 2019</p>	<p>Snoezelen as a Means of Developing Sensory Perception in Pupils with Moderate and Severe Intellectual Disabilities</p>	<p>Qualitative research using techniques: analysis of documentation, case studies, participatory observation</p>	<p>Seven pupils with moderate and severe intellectual disabilities (four boys and three girls), aged 9-18 years</p>	<p>To find out how the Snoezelen concept develops sensory perception in pupils with moderate and severe intellectual disabilities at two special primary schools</p>
<p>Matějčková, S., 2019</p>	<p>Use of Snoezelen for Pupils with Autism Spectrum Disorder</p>	<p>Qualitative research using techniques: case studies, participatory observation (use of field notes), evaluation of results based on a specially designed scale (assessment scale)</p>	<p>Two pupils (boys) of a special primary school, aged 8-9 years</p>	<p>To verify whether Snoezelen has a positive effect on pupils with autism spectrum disorders in the various components of the autism spectrum disorder triad: communication, socialization, and imagination</p>

<p>Matějková, L., 2018</p>	<p>The Use of the Snoezelen Concept in the Education of Pupils with Severe Intellectual Disabilities</p>	<p>Qualitative research using techniques: analysis of pupils' documentation (including medical reports and reports from special education centres), participatory observation of pupils with an evaluation scale, interviews with parents, case studies</p>	<p>Five pupils of a special primary school with severe intellectual disabilities and multiple disabilities (two boys and three girls), aged 15-19 years</p>	<p>To verify the specifics of the use of the Snoezelen concept in the education of pupils with severe intellectual disabilities at a special primary school</p>
<p>Saňáková, J., 2018</p>	<p>Use of the Concept of Basal Stimulation and the Method of Snoezelen at a Special Primary School</p>	<p>Qualitative research using techniques: case studies, analysis of documentation, active observation, semi-structured interviews with a class teacher, teaching assistants, and parents</p>	<p>Six pupils of a special primary school with moderate, severe, profound intellectual disabilities, multiple disabilities, and autism spectrum disorder (three girls and three boys), aged 9-14 years</p>	<p>To analyse the influence of basal stimulation and the Snoezelen method on pupils at a special primary school</p>

Dítětová, J., 2016	The Use of the Snoezelen Concept to Support Education at a Special Primary School	Qualitative research using techniques: analysis of pedagogical documentation, direct observation of pupils, special work with pupils, interview with teachers and parents	Five pupils of a special primary school with moderate, severe intellectual disabilities and multiple disabilities (three girls and two boys), aged 10-13 years	To verify the use of the Snoezelen concept in the education of pupils at a special primary school
Macků, K., 2016	Efficacy of Aids used in Snoezelen in Children with Autism Spectrum Disorder of Preschool Age	Qualitative research using techniques: case studies, observation, interviews, analysis of professional medical, pedagogical, and psychological documents, results recorded in record sheets and evaluated based on scaling using purposely designed scale	Four children (boys) with autism spectrum disorder, aged 4-6 years	To verify the effectiveness of the aids used in Snoezelen in children with autism spectrum disorder

<p>Nečasová, L., 2015</p>	<p>Development of Sensory Perception in the Snoezelen Room at the Special Primary School for Pupils with Moderate and Severe Intellectual Disabilities</p>	<p>Qualitative research using techniques: case studies, analysis of pupils' personal file documentation, record sheets, non-participatory observation, records with inventories</p>	<p>Seven pupils of a special primary school (five boys and two girls), aged 8-13 years</p>	<p>To find out how senses develop in pupils with moderate and severe intellectual disabilities in the Snoezelen room at two special primary schools</p>
<p>Zedková, B., 2014</p>	<p>Possibilities of Using the Snoezelen Method in the Education of Pupils with Severe Disabilities and Multiple Disabilities</p>	<p>Qualitative research using techniques: analysis of pedagogical documents (pupil documentation), participatory observation (notes, observation records), interviews with teachers, case studies</p>	<p>Two pupils (boys) of a special primary school with severe disabilities and multiple disabilities, aged 11-17 years</p>	<p>To determine the influence of Snoezelen on selected personality components of pupils with severe disabilities and multiple disabilities</p>
<p>Krausová, V., 2013</p>	<p>Use of Multisensory Room Snoezelen and Elements of Basal Stimulation in Children with Severe Disabilities</p>	<p>Qualitative research using techniques: participatory observation, analysis of pupils' personal and school documentation, unstructured interviews with pupils' parents and teachers, case studies</p>	<p>Three pupils of a special primary school (one boy and two girls), aged 7-13 years</p>	<p>To analyse and evaluate the use of the Snoezelen multisensory room in the intellectual (attention, concentration) and social (interaction with others) area, for pupils with severe disabilities</p>

Cacková, A., 2009	Use of Snoezelen as a Prevention of Self-harm in Individuals with Multiple Disabilities	Qualitative research using techniques: analysis of documents (medical, pedagogical, psychological, etc.), observation, interviews with teachers, analysis of activity results, case studies	Four pupils of a special primary school with manifestations of self-harm, aged 6-19 years	To verify the importance of using Snoezelen as a prevention of self-harm in individuals with multiple disabilities
Plecháčková, M., 2009	Use of Multisensory Room Snoezelen for Children with Hearing Impairment	Qualitative research using techniques: document analysis, semi-standardized interviews with teachers and pupils, observation, natural experiments with pupils, case studies	Four pupils attending primary school for the hearing impaired (three boys and one girl), aged 11-14 years	To describe the Snoezelen multisensory room and the possibilities of its use in the field of special education

<p>Šoupalová, J., 2009</p>	<p>Aspects of Using the Snoezelen Multisensory Room</p>	<p>Qualitative research using techniques: qualitative observation (participial observation), qualitative questioning (standardized interview with closed questions), qualitative methods of data collection, field notes</p>	<p>Four special educators from three facilities (home for people with health disabilities, primary school and practical school, special school)</p>	<p>To provide the widest possible range of information regarding the effective use of the Snoezelen multisensory room and the possibility of increasing the quality of life and personality development of pupils with severe intellectual disabilities and multiple disabilities through a consciously selected and manageable offer of primary stimuli in a pleasant and safe Snoezelen atmosphere</p>
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<p>Vostrejšová, D., 2009</p>	<p>The Effect of Snoezelen in the Stimulation of Individuals with Severe and Multiple Disabilities</p>	<p>Qualitative research using techniques: analysis of professional texts and documents, long-term observation, active work with the monitored pupils, interviews with therapists and pedagogical staff, case studies</p>	<p>Four pupils of a special primary school (two boys and two girls), aged 11-16 years</p>	<p>To verify the positive effect of perception of basic sensory stimuli (auditory, visual, olfactory, tactile, and taste) in the environment of Snoezelen on individuals with severe disabilities and multiple disabilities</p>
<p>Krzyžanková, L., 2006</p>	<p>Snoezelen as a Method of Positive Basal Stimulation</p>	<p>Qualitative research using techniques: analysis of records about pupils in the monitored class, free observation of situations, structured observation according to selected categories, natural experiments with pupils, non-standardized interviews with pupils' parents, analysis of results of selected pupils' activities</p>	<p>Six pupils of a special primary school (two boys and four girls), aged 9-17 years</p>	<p>To verify the positive impact and effect of perception of basal sensory stimuli in pupils at a special primary school</p>

Results of the Review

In a study, Pešatová (2021) investigated whether sensory perception develops in a multisensory room during regular targeted educational activities of selected pupils with severe intellectual disabilities. The research involved four pupils attending the same class (two girls and two boys aged 8–14) who visited the Snoezelen room once a week for the duration of the study. The study was carried out in the form of a long-term direct observation for six months, during which time data were collected to compare pupils' progress in sensory perception, their mental well-being, and whether their Snoezelen experiences were transferred to the classroom. After the end of the research, it was confirmed that Snoezelen had had a significant influence on the development of sensory perception in pupils with severe intellectual disabilities, since in each of them there had been some improvement in sensory perception. Research has shown that the more often individual senses are stimulated, the more often pupils use them to explore the immediate area outside the Snoezelen room. During the research period, it was also found that the observed pupils experienced an increase in their sense of security and general relaxation during their stay in Snoezelen. Targeted activities affected the mood and mental state of the pupils. There were no negative reactions during Snoezelen activities; on the contrary, expressions of pleasure, e.g., smiles and even audible laughter, were observed in the pupils. The study indicated that being in the Snoezelen room helped to improve the mental well-being of pupils.

The goal of Piknerová's research (2020) was to analyse the ability of pupils with multiple disabilities to interact socially after regular targeted educational activities in the Snoezelen room. The study focused mainly on the development of relationships and ties with family members, teachers, and peers, and examined the effects of the concept on the educational process, the development of sensory perception, communication, and emotionality of pupils. The research consisted of processing five case studies of pupils with multiple disabilities, mapping family relationships, health status, and social, personal, and school history. By directly observing the educational activities in the regular classroom and in the Snoezelen room during one school year, data were collected to compare the development of pupils in the monitored areas. The study found that there was no drastic progress in the monitored pupils in any of the defined categories. However, there were small changes in their ability to use visual perception (in the form of more frequent monitoring of classmates and activities in joint activities), more frequent reactions when addressed and given verbal instructions by the teacher, some use of hands for physical contact with other classmates, and slight progress in activating communication. It can therefore be assumed that the use of Snoezelen had an impact on the development of pupils' communication with their environment. Although the researcher found only minimal shifts in development in the monitored areas for participants, it can also be assumed that Snoezelen influenced the formation of social interaction in the monitored pupils with multiple disabilities.

In another study, Cmajdálková (2019) investigated how structured teaching in the Snoezelen environment affected special school pupils with various types of disabilities (including severe intellectual disabilities, multiple disabilities, and autism spectrum disorders) in terms of cognitive functions (thinking, memory), behaviour, and communication; and also explored the specifics that should be considered in the teaching of pupils with different types of disability. The qualitative research used the case studies of seven pupils and included observation and interviews with teachers. Structured teaching in the Snoezelen environment positively influenced the cognitive functions and behaviour of pupils, especially pupils with moderate intellectual disabilities, but also pupils with severe and profound intellectual disabilities. Following consistent long-term enrolment, positive changes of a qualitative nature could be observed in the monitored areas. Education in the Snoezelen environment played an irreplaceable role in the development and education of these pupils.

The main goal of Krchová's study (2019) was to establish how sensory perception is developed in pupils in a special primary school with moderate and severe intellectual disabilities through the Snoezelen concept. The author adopted a qualitative research strategy, involving techniques of document analysis, case studies of pupils, and participatory observation. The study ran for two months, with the research sample consisting of seven pupils. The observed lessons in Snoezelen showed that the pupils' individual senses were not developed to the same extent, so it can be concluded that the degree of development of individual senses depends on the content of lessons (structured thematic lessons that seek to develop all the senses, taking into consideration the individual needs of the pupils), the pupils' diagnoses, and the approach, abilities, interest, and education of the teacher or therapist who leads the lesson. The research survey recommended focusing on the development of all senses, especially stimulation of the (very often neglected) sense of taste.

Matějčková (2019) carried out a study on the use of Snoezelen in pupils with autism spectrum disorder. The goal of the research was to verify whether Snoezelen had a positive effect on pupils with autism spectrum disorder in targeted development of communication, socialization, and imagination. The selected qualitative methodology of the study used the techniques of case studies, and participatory observation using evaluation with an assessment scale. The research sample consisted of two pupils aged eight and nine years diagnosed with autism spectrum disorder. The results of the study showed that Snoezelen was beneficial to the development of pupils with autism spectrum disorder in the triad of disabilities (communication, socialization, and imagination). The research indicated that Snoezelen did not develop every component of each pupil's triad of difficulties, but suggested that Snoezelen generally had a positive effect on pupils with autism spectrum disorders and could help them with deficits in communication, socialization, and imagination. In the field of communication, there were developments in vocabulary, and in understanding the meaning and significance of communication (in the sense of influencing reality). The development of socialization was a guided effort to reduce aggression, calm the individual, develop social relationships/teacher-child

relationships, suppress unwanted behaviour, and improve mental well-being. In the field of imagination, a better transition between individual activities, and better acceptance of the offered stimuli were attempted.

The study by Matějková (2018) aimed to verify the specifics of using the Snoezelen concept in the education of pupils with severe intellectual disabilities to find out: how pupils respond to new stimuli in the Snoezelen environment, whether pupils with severe intellectual disabilities are calmed by this environment, and in which areas the Snoezelen concept can help pupils with severe intellectual disabilities to develop. The qualitative research applied the techniques of analysis of pupils' documentation, participatory observation of pupils, and interviews with parents. The information from the observation of participants was supplemented by an analysis of the available documentation: i.e., everything that was officially and unofficially recorded, including notes. As part of the study, five case studies (of two boys and three girls aged 15–19) were selected. The analysis of the outcomes of the activity took place in pre-prepared structured Snoezelen lessons, which the pupils attended during morning lessons two-three times a week. The study indicated that the Snoezelen concept is a very suitable means of supplementing pupils' education. The obtained results showed that repeated stays of these pupils had a positive effect on the development of their personality. It is important not to neglect any of the senses that can be stimulated in pupils in preparation for Snoezelen. All pupils responded positively to the stimuli offered in a multisensory environment, or new stimuli received after repeated visits to the Snoezelen room.

The main goal of a study by Saňáková (2018) was to analyse the impact of the Snoezelen concept on pupils with autism spectrum disorders, and on pupils with profound intellectual disabilities. The research aimed to analyse whether Snoezelen improved communication and calm behaviour in pupils with autism spectrum disorder. For pupils with profound intellectual disabilities, it focused on improving gross motor skills, self-perception, and pupils' response to bodily contact. The method of qualitative research was chosen for the study, using the techniques of processing case studies (supplemented with information from the pupils' parents), active observation, and semi-structured interviews with the class teacher and teaching assistants. The research took place over a period of 18 months and involved six pupils of a special primary school (with autism spectrum disorders, moderate, severe, and profound intellectual disabilities). As a result of the study it can be stated that the contribution of Snoezelen to the education of the selected sample of pupils was considerable, but it was not possible to compare the progress in the development of individual pupils due to differences in type of disability and age.

The main goal of a study by Dítětová (2016) was to verify the use of Snoezelen in the education of pupils in a special primary school. The study used qualitative research methods, including analysis of pedagogical documentation, direct observation of pupils, special work with selected pupils, and interviews with teachers and parents. Five case studies of selected pupils aged 10–13 years were processed. The study found that Snoezelen offered a relatively large range of uses for working with pupils in a special primary school. It was possible to use it purposefully in the educational process

as a change of environment that was interesting and attractive for pupils, and pupils were calmer and more focused in the Snoezelen environment. Another way of using Snoezelen is in combination with basal stimulation, which is important in helping pupils with severe disabilities to relax. The study indicated that Snoezelen was suitable for use in primary schools, especially for education, rehabilitation, and relaxation.

Macků (2016) aimed to verify the effectiveness of aids used in Snoezelen in children with autism spectrum disorder in preschool education. The study was carried out through qualitative research using case studies, which were processed by techniques of observation, interviews, and analysis of professional medical, pedagogical, and psychological documents. Subsequently, the results were recorded in record sheets, which were evaluated based on scaling. The research sample consisted of four preschool children with autism spectrum disorder. The research was carried out over six months, during which time Snoezelen was gradually included in teaching. The key to choosing aids is to meet conditions for the development of the senses: namely aids that stimulate sight, hearing, touch, and the vestibular apparatus. According to the results of the study, the use of the Snoezelen method had a very positive effect on the whole personality of children with autism spectrum disorder, with positive results reflected in both their education and everyday life.

The main goal of Nečasová's research (2015) was to determine how the senses developed in pupils with moderate and severe intellectual disabilities in the Snoezelen room, and whether all their senses developed equally. A qualitative strategy was chosen for the study. Short case studies of seven pupils aged 8-13 studying at a special primary school were included. Record sheets were used to record the events in Snoezelen, and the technique of non-participatory observation was used for data collection. The research indicated that ways of developing the senses were different, depending on many aspects: e.g., the teacher who led the lesson, the pupil, his/her type and degree of disability, his/her current mood, and the aids used in the lesson. The study concluded that the individual senses were not developed to an equal extent in the monitored group of pupils; visual and auditory stimuli were developed in each monitored lesson, olfactory stimuli were supported in the middle of the observed lessons, and olfactory stimuli were not included in the teaching at all. The author of the study recommended that teaching in Snoezelen be based on a holistic approach, with all senses developed with the same intensity.

The study by Zedková (2014) aimed to determine the influence of Snoezelen on selected components of personality (level of communication, ability to respond to the stimuli presented) and the influence of Snoezelen on the psychological well-being of the pupil. The author based the study on qualitative research methods, elaborating the case studies of two pupils with severe disabilities and multiple disabilities who purposefully participated in education in the Snoezelen room for almost one year. Stays in the room took place regularly once a week. The results of the research showed that the use of the Snoezelen method was beneficial for both pupils. Staying in a multisensory room provided them with a pleasant environment for relaxation, unwinding, the opportunity to get to know

each other, better interaction with the environment, and further development of their abilities.

Krausová (2013) dealt with the issue of supporting pupils with severe disabilities through elements of basal stimulation, applied in the multisensory environment of Snoezelen. The goal of the research was to analyse the use of multisensory room Snoezelen. The researcher focused on: monitoring the reactions of a selected group of pupils (three pupils from different classes aged 7–13: one boy, two girls) to new stimuli; the pupils' reactions to teachers and classmates in the Snoezelen room; and analysis of the use of basal stimulation of pupils with regard to visual, auditory, and somatic stimuli. A qualitative research approach was chosen for the study, applying the technique of participatory observation, which was crucial to the implementation of this research. The study continued for one school year, twice a week for 45 minutes. All results obtained indicated that the repeated stay of pupils with severe disabilities in Snoezelen increased their attention and ability to concentrate. This subsequently manifested itself both in the activities in Snoezelen and in regular schooling. Cooperation with pupils improved overall. Pupils concentrated longer in lessons, and their acquisition of new skills was faster. The results of the study indicated a positive influence on the development of the interactions of the observed pupils with teachers and other classmates. The pupils began to accept contact more readily, and, at the same time, to initiate it more themselves. The greatest progress was made in the development of interactions that occurred through somatic stimulation. Based on the results of the research survey, it can be stated that it is appropriate for all pupils to use targeted activities in the Snoezelen environment for their development, which should be supplemented by basal stimulation. The goal of the study by Cacková (2009) was to verify the importance of using Snoezelen as a prevention against self-harm in pupils with multiple disabilities. A qualitative method was chosen for the research survey, involving observation techniques, interviews, document analysis, and analysis of activity results. For the research project, four special primary school pupils with multiple disabilities and diagnosed as self-harming, were selected. The research focused on whether the inclusion of basal stimulation and massage activities in Snoezelen allowed individuals to gain a positive experience through their body, and whether these activities contributed to an overall calming of the pupils. During the study, it was found that manifestations of self-harm were influenced by many factors, and therefore it could not be stated unequivocally that the inclusion of activities in Snoezelen alone reduced the manifestations and intensity of self-harm. However, the conclusions of the research confirmed that the use of basal stimulation, massage, and Snoezelen are of great importance to the development of pupils with multiple disabilities, providing them with positive experiences gained through their body after application of basal stimulation. However, in each activity, it is necessary to monitor pupils' reactions and include and develop those activities in which a positive response and self-assurance of the pupil is evident.

Plecháčková (2009) carried out a study dealing with the use of the Snoezelen multisensory room in pupils with hearing impairment. The goal was to describe the functioning

of Snoezelen in a school for pupils with hearing impairment, to verify the benefits of the multisensory room when working with pupils with hearing impairment (to find out whether staying in a multisensory room and applying methods can be beneficial for such pupils), and to characterize the advantages and disadvantages of methods and procedures used for working in the Snoezelen multisensory room with pupils with hearing impairment. To meet the research goal, the author chose a qualitative strategy using research techniques of document analysis, interviews, observation, natural experiment, and case studies of four pupils aged 11–14 from a primary school for pupils with hearing impairment, for one school year. The results of the research showed that the use of Snoezelen in pupils with hearing impairment was appropriate. Activities carried out in this room corresponded to the specific needs of these pupils. Based on long-term observations, the advantages, and disadvantages of including these methods in the educational process at primary school for pupils with hearing impairment were specified. One advantage is the possibility of applying special pedagogical procedures with therapeutic elements; Snoezelen is suitable for all age groups of pupils, for school counselling centres, for school groups, and for pupils in their free time. Disadvantages are the higher financial costs of the establishment of Snoezelen at schools, the need for further education of teaching staff, and organizational issues around the inclusion of the use of Snoezelen in schools.

Šoupalová's research (2009) dealt with the issue of mediating the widest possible range of information regarding the effective use of the Snoezelen multisensory room, and the possibility of improving the quality of life of people with severe intellectual disabilities and multiple disabilities through a targeted offer of primary stimuli in a safe Snoezelen atmosphere. The study took place in three facilities in which the Snoezelen multisensory room was used for various selected activities: therapeutic activities, animal therapy (dog), music therapy, and targeted support of visual perception in the form of light effects. A qualitative research method was chosen for the study, using techniques of participatory observation, standardized interviews with closed questions, and data collection with field notes. The research sample consisted of four special educators who had long-term experience of working in Snoezelen. In monitored facilities, use of the Snoezelen multisensory room is an extremely beneficial approach, provided mainly to individuals with severe intellectual disabilities and concurrent multiple disabilities. It is difficult to approximate the way of experiencing reality, thinking, and perception of these individuals. One option is Snoezelen and the use of the multisensory room, which allows the arousal of individual sensations. The multisensory stimulation that takes place in Snoezelen is one of the most common and successful approaches, not only with regard to learning, but also to therapeutic procedures for people with severe disabilities. The study carried out by Vostrejšová (2009) aimed to verify the positive effect of basic sensory stimuli (auditory, visual, olfactory, tactile, and taste) in the environment of Snoezelen on individuals with severe disabilities and multiple disabilities. The study employed qualitative research techniques of analysis of pupil records, and elaboration of case studies of four selected pupils (pupils who were immobile, with multiple

disabilities, or with severe to profound intellectual disabilities). One of the main methods used in the education of these pupils is multi-stimulation method Snoezelen. In an artificially created environment, pupils with severe disabilities have deep experiences that they would not have the chance to experience in everyday life. Snoezelen is one of the ways to offer a form of self-realization to pupils with severe disabilities and limited opportunities to perform activities by themselves, allowing them to enjoy success, joy, and other sensations that they would not otherwise experience. In all the monitored pupils, Snoezelen had a positive effect on the improvement of their quality of life; during the planned activities, the pupils were generally reassured and the connection with the teacher was strengthened.

The main goal of the study by Krzyžanková (2006) was to verify the expected positive impact and effect of perception of basal sensory stimuli in pupils with severe and profound disabilities and multiple disabilities educated at a special primary school. The chosen qualitative strategy of the study and the techniques applied (analysis of pupils' records, structured observation according to selected categories, natural experiments, interviews with pupils' parents, and analysis of results of pupils' activities) gave the researcher a deep insight into the education of pupils with multiple disabilities. Pupils with severe disabilities usually lack the stimuli for their development, and this can increase their disability. The Snoezelen concept is based on a holistic approach to individuals with severe disabilities, fulfilling their needs for acceptance, understanding, closeness and, if possible, sensory perception and experience. The more severe the degree of intellectual disability in pupils, the more appropriate sensory stimulation of pupils becomes for their development. The use of therapies in Snoezelen rooms is met with great enthusiasm by both pupils and special educators. Snoezelen is perceived as a place to meet, to strengthen mutual belonging, a place where they experience joy, where they feel 'good', and where it is possible to create a sense of security in pupils. The study indicated a positive impact of the use of Snoezelen in targeted educational activities of pupils with severe intellectual disabilities and multiple disabilities.

Conclusion

The studies that we have presented in the text are monothematic and focus on the use of the Snoezelen concept in the field of support and education of pupils with severe disabilities and multiple disabilities who are educated in special schools. In the analysed studies, the issue of supporting educational goals for these pupils prevails; in most research, the achievement of these educational goals involves Snoezelen in conjunction with another concept of support, i.e., basal stimulation. The analysis of studies confirmed the expected results of using Snoezelen in the environment of special schools to achieve educational goals set by special educators with high professional knowledge. In most research, we learn how well-equipped the Snoezelen rooms are in special schools, which predominate in providing this specific support to individuals with severe disabilities.

Of the 17 selected studies, 14 dealt with the support of pupils with severe disabilities and multiple disabilities, two focused on the support of pupils with autism spectrum disorder, one on preschool children, and one on pupils with hearing impairment. Based on our analysis of the selected studies, it can be stated that Snoezelen is most often used in special schools that educate children and pupils with severe disabilities or multiple disabilities, and that special educators who work at these schools manage their pupils with Snoezelen and basal high-level stimulation. These concepts are currently the main educational methods in special schools for pupils with severe disabilities, complemented by other therapeutic and formative approaches. The results of the survey study, which focused on the use of the Snoezelen concept, clearly demonstrate the sustainability and high level of use of this concept in the education of pupils with severe disabilities during compulsory education in special schools and under the guidance of fully competent special educators.

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SENSORY PROFILE IN THE SNOEZELN INTERVENTION

**María José Cid Rodriguez
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Abstract

In this article we present a tool for professionals who work in care services (24-hour services) with people with a type of dependency and/or developmental disability, such as dementia and/or Alzheimer's, intellectual disabilities, autism spectrum disorders etc. Sensory interventions for these people are primarily focused on offering them better quality of life and increased emotional well-being.

Sensations are the basis of well-being and are present and functioning in everyone, regardless of their level of dependence. The main challenge for professionals and institutions is to provide the most appropriate intervention to each person and, thereby, ensure a pleasant and enjoyable environment and daily activities that accord with his/her capabilities. It is necessary to start from the most reliable knowledge possible of the sensory capacities, tastes, and sensory preferences of the subject.

The article includes practical examples of Sensory Assessments that allow us to elaborate the Sensory Profile of a person, involving every sense (visual, auditory, tactile, proprioceptive, olfactory, gustatory, and vestibular), in order to identify the sensory capacities of the person, his/her tastes, and sensations of displeasure and discomfort.

Based on qualitative observational methods, the article provides a practical guide to performing a Sensory Assessment.

Keywords

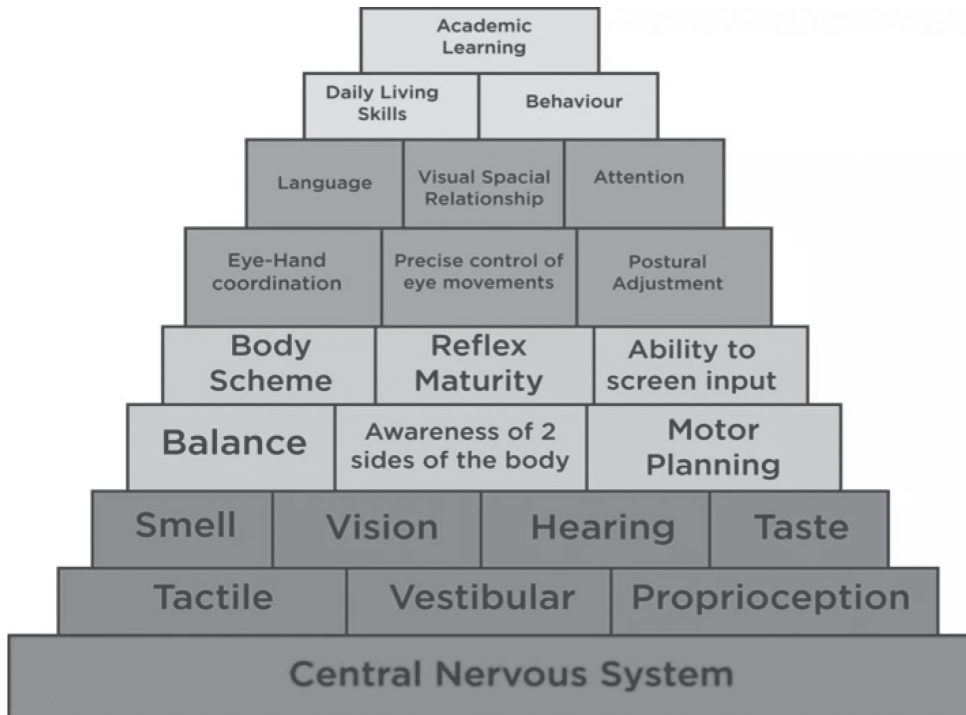
Snoezelen, sensory profile, sensory assessment, sensations, sensory intervention

Introduction

Our emotional well-being begins with our ability to have daily experiences appropriate to our basic neurological capacities, i.e., our sensations. From the developmental

and learning pyramid of Williams & Shellenberg (1996), we know that all the information that reaches us stems from our basic sensations.

Figure 1 Development and learning Pyramid. (Williams & Shellenberger, 1996)



The first thing we must ask ourselves is what are the basic sensations? According to the developmental pyramid above, these are the sense of touch, the vestibular (or kinesthetic) sense, and the proprioceptive sense. We call them basic sensations because they are the most ancient and primitive sensations. The first sensations that developed in our phylogenetic ancestors were these basic sensations. Also, at the ontogenetic level, they are the first to start operating. In ontogenetic evolution, when the fetus begins to form in the mother's womb, the first sensory capacities that appear in the amniotic fluid are the sensations of touch, vestibularity, and proprioception. These three basic sensations are also the last to disappear.

At the end of life, the Williams and Shellenberg developmental pyramid operates in reverse. As advanced deterioration occurs, cognitive and executive abilities may disappear, due to possible neurological changes to the prefrontal lobe. However, the basic sensations, located in the lower parts of the cortex, are better preserved. It should also be noted that these sensations are close to the limbic system, and therefore, to the emotionality of an individual. For this reason, it is important to understand that while a person with

advanced cognitive impairment may have compromised cognitive abilities, they retain the ability to feel emotions, primarily linked to the most basic sensations.

Above the basic sensations, we find the sensations of Sight, Hearing, Smell and Taste. These sensations are essential for the daily functioning of the individual. The correct functioning of the different sensory systems will allow a person to be connected with his/her environment and with him/herself in a satisfactory manner.

For each individual, especially those with a type of neurological disorder, developmental delay, intellectual disability, mental illness, autism, etc., the functioning of their various sensory systems is essential for their well-being. A person will have particular sensory capacities, determined by different factors: their genetics, their habits, their environment, their cultural context, their condition on a given day, and, above all, the presence or absence of a physical, neurological, or other type of disorder.

The Snoezelen intervention makes it possible to provide the person with emotional well-being through their sensations. The Snoezelen philosophy in this sense is predicated on generating sensory experiences for the person that create a pleasant day-to-day existence, through appropriate and varied sensory experiences. Sensoriality is important in all people, but it is of particular importance in the profiles of people such as those mentioned above (people with cognitive impairment, dementia, Alzheimer's, intellectual disability, mental illness, autism, etc). The Snoezelen intervention should, therefore, allow us to provide sensory experiences in the most suitable way possible to support the physical and emotional well-being of the person.

In order to plan an appropriate sensory intervention, it is first necessary to be aware of the sensory capacities of an individual: to obtain the most reliable information possible on each of their senses and their functioning. In addition to his/her sensory capabilities, it is important to know the sensory preferences of each person: to know which intensities and characteristics of each stimulus generate well-being or, on the contrary, cause discomfort or displeasure. In this way, we can establish a baseline, or starting point which we can use to plan a precise personalised sensory intervention. All such sensory information about the person, his/her sensory capacities, his/her preferences, or his/her sensory sensations of displeasure make up what we call their Sensory Profile.

The benchmark in terms of Sensory Profile and Sensory History is the work of Winnie Dunn and her collaborators. Dunn's Sensory Profile (Dunn, 1994, Tomchek, Dunn, 2007), in its original version, is divided into six sensory categories (auditory, visual, taste/smell, movement, body position, and touch) and two behavioural categories (emotional/social, and activity level), with a total of 125 items. A principal component factor analysis of the Sensory Profile was carried out based on the responses of 1,115 children aged 3 to 10 years who had typical development (Dunn and Westman, 1997, Brown et al, 2001). The resulting factor structure did not suggest categories of sensory modalities but rather patterns of behavioural response. This factor analysis led to the development of Dunn's (1997) Sensory Processing Model, which characterizes four different sensory processing tendencies (people with low sensory registration, sensation seekers, sensory sensitive people, and sensation avoidants).

One way to measure sensory processing from a behavioural perspective is to obtain a sensory history. Advantages of sensory histories over other measures include ease of administration and contextual relevance (Dunn, 1994). Sensory histories are contextually relevant because they allow the assessment of behaviours in the natural environment rather than the commonly used alternative of performance observation in a clinical setting. In addition, sensory histories allow the person or family member who is the focus of the history taking to be an active participant in the assessment.

The model presented here is very practical and easy to use for professionals from the various healthcare services. It can be used with both children and adults, with or without verbal communication. Through the information observed in the Sensory Assessment, it allows us to draw up a Sensory Profile of the person, in order to have a baseline that indicates to care professionals the objectives to be considered in the planning of day to day care for the person, and of specific interventions in the Snoezelen Room that are as targeted as possible.

Sensory profile

Before beginning a Snoezelen intervention with a patient, it is essential to have previously established hi/her Sensory Profile. Professionals require a framework that provides a baseline from which to plan an intervention in the most appropriate way. The Sensory Profile should be an instrument that is simple to use for professionals who work in the care of people in vulnerable conditions (dementia, Alzheimer's, intellectual disability, autism spectrum disorders, etc.). It should be a tool that can be used in the workplace, in specialized institutions, in schools, etc. Finally, it should be a practical tool that does not require apparatus and instruments unavailable to these professionals.

We will now present a tool designed for this purpose, taking into account the fact that it is a tool with limited reliability, and involves a certain degree of subjectivity on the part of the professional who applies it. A totally reliable way to perform a sensory profile could be, for example, from Evoked Potentials. That is, to present a certain sensory stimulus to a person and to record the brain responses to the given stimulus with a polygraph machine. We know that this way of proceeding would be more reliable and error-free. However, we also know that a methodology of this type is not applicable in most institutions and services that conduct Snoezelen interventions. These institutions do not have polygraph instruments or trained professionals able to use and interpret them. Thus, we need a tool that allows us to establish a Sensory Profile as reliably as possible, albeit with a certain margin of error. It should also be noted that in the group of professionals who care for people with types of vulnerability such as those mentioned above, there has not been a tradition of measuring and evaluating people's sensory capacities as objectively as possible. Nevertheless, we think that having a tool like the one we propose here will be of great help to these professionals.

The Sensory Profile that we propose has been designed according to two basic premises: it should be easy to use (the professionals who perform the Snoezelen intervention are

familiar with the tool; thus it should not cause any difficulties); and it should be quick to use (it does not require excessive time to complete it, since professionals are often short of time). In addition, it should be able to generate as much information as possible about the person's sensoriality, so that we can design Snoezelen interventions in an appropriate and specific way according to the individual characteristics of the person.

We will refer first to the Sensory Assessment, i.e., to the results recorded and observed when we offer the person different magnitudes and types of sensory stimuli. From the observations we register the types of response of the person, of liking or rejection, to each sensory sensation that we present. When the Sensory Assessment has been completed, the Sensory Profile can be prepared: a record of the most significant results for each sense. The Sensory Profile will generate the baseline from which we can plan interventions with the person in the most appropriate way, either in terms of activities of daily life and activities in general, and, more specifically, in the design of sessions in the Snoezelen Room.

Sensory Assessment

The context to perform the Sensory Assessment (Methodology Guide)

The Sensory Assessment of a person will take place on a specific day, in a specific context. We should be aware that on this day, the person will be in a certain condition, as will the professional who performs the assessment. In light of this, we should bear in mind that the results of the Sensory Assessment are to be taken as a guide, providing basic information that may be subject to a degree of bias. However, it will, nevertheless, be a starting point that can mark the beginning of the multisensory intervention with the person.

Place: it is recommended that the sensory assessment be conducted in a quiet room which is not subject to distractions that may affect the results of the Assessment. We want to assess the person's responses to the stimuli that we present to them rather than their responses to unintended environmental input that may also affect the results. A Snoezelen Room is a good place to perform the Sensory Assessment, since it is a quiet, isolated place, in which environmental stimuli can be controlled. If a Snoezelen Room is not available, it is recommended that a space be found that is as quiet and isolated as possible, such as the person's own room, a suitable room in the facility, an office, etc.

Position and predisposition of the person: when starting the Sensory Assessment, it is essential to guarantee the well-being and comfort of the person. We want to assess his/her responses to the stimuli that we will present to him/her, and not his/her response to general discomfort or distress, for example. Therefore, it is necessary to position the person comfortably, making allowances for their condition, postural control, and preferences. We should also ensure that he/she is comfortable in terms of clothing and other external factors that may influence his/her comfort.

Professionals and registration: it is recommended that two professionals be present during the Sensory Assessment. One should present the different stimuli to the person. Since the person should be made to feel as safe as possible, it will facilitate the process if the professional is known to the patient. If not, it is necessary to devote time to building trust. The second professional is the observer, who will record the person's responses to the different contexts of the stimulus. This record may be visual (a recording of the assessment session) and/or written (a recording of the person's responses in writing on an assessment sheet), and ideally both should be made. Recording the sensory evaluation will allow us to observe behavioural responses that perhaps may have gone unnoticed, revealing sensory sensations that are important for the emotional well-being of the person.

Materials: we should have the materials necessary to carry out the sensory assessment to hand. Materials should be specially selected and should not require overly technical elements.

Sensory Assessment Methodology: in practice we work with Sensory Assessment sheets (created as part of the methodology for evaluating the person's sensory responses in different situations).

Behavioural responses that we assess: the Sensory Assessment sheets are designed to record responses of people with high levels of dependency and/or with difficulties in verbal communication. It is important to note that answers can be adapted to take the user's profile into consideration. They are qualitative, observational responses through which we try to record, above all, the positive or negative reactions elicited by each sensory stimulus. The responses recorded are:

- Eye movements: record whether the person makes eye movements in response to the presented stimulus.
- Avoidance/withdrawal: record whether the person shows avoidance behaviours in response to the presented stimulus.
- Vocalizations/verbalizations of pleasure or displeasure: record whether the person demonstrates non-verbal or verbal expressions of pleasure or displeasure in response to the presented stimulus.
- Voluntary movements/gestures: assess whether the presented stimulus generates voluntary movements in the person.
- Modification of muscle tone: record whether the presented stimulus generates variation in muscle tone in the person. Variation can be in the sense of relaxation (decreased muscle tone) or activation (increased muscle tone).

It should be noted that in addition to the above-mentioned responses, it is also important to note down and qualitatively record any other responses from the person which we consider significant and which is not included in the previous sections.

We will now look at how the sensory assessment is conducted for each sense.

Visual Sensory Assessment: three micro-capacities will be assessed in the visual sensory response:

- **Visual reaction:** to assess whether the person reacts when a visual stimulus is presented in different magnitudes and experimental situations.

- **Visual fixation:** to assess whether the person, in addition to his/her reaction, is able to fix his/her gaze on the visual stimulus presented.
- **Visual monitoring:** in order to assess whether the person is able to follow the visual stimulus presented, the visual stimulus is moved gradually, first in a cross pattern (from top to bottom and from left to right), then diagonally, and finally, in a circle. We observe if the person follows the visual element presented with his gaze as we move it.

The assessment is conducted in three environmental situations:

- Maximum light or normal ambient light: with lights or with natural daylight.
- Dim light: it is important to have a dimmer switch for ambient light to be able to slightly reduce the intensity of the light.
- Darkness: the room is left in darkness, without light. A light stimulus is presented and the responses are observed. This environmental condition is especially indicated for those with poor visual acuity. The contrast between light and dark means we can see whether there is any type of reaction.

The stimuli that are presented in the visual assessment are:

- Personal stimulus: the professional him/herself is presented as the stimulus. We observe how the user reacts when he/she sees the caregiver.
- Attractive visual stimulus: an attractive visual stimulus with striking colours is presented to the person.
- Luminous stimulus: A luminous element (a bundle of optical fibres, a flashlight, or any element that emits light) is presented, typically in the dark, but it can also be shown in the other environmental conditions

Sensory Auditory Assessment: two micro-capacities will be assessed in the responses to auditory sensory stimuli:

- Auditory reaction: to assess whether the person shows any type of reaction when presented with an auditory stimulus in different magnitudes and experimental situations.
- Auditory localization: to assess whether when presented with an auditory stimulus in different magnitudes and different experimental situations, the person tries to locate the origin of the sound source with head, eye, or body movements.

The assessment will be carried out with three different intensities of magnitude of auditory stimulus:

- Low intensity of auditory stimulus: a quiet sound is emitted.
- Intermediate intensity of auditory stimulus: a medium sound is emitted (the sound intensity is neither low nor high).
- High intensity of auditory stimulus: a loud sound is emitted.

The types of auditory stimuli that we will present are:

- The Human Voice: the professional who carries out the assessment addresses the person, saying his/her name in the three aforementioned intensities (low, intermediate, and strong), for several repetitions at each intensity.

- High-pitched sound: the person will be presented with an auditory stimulus with a high-pitched sound, such as a musical instrument, e.g., a triangle. There will be several repetitions.
- Low-pitched sound: the person will be presented with a sensory stimulus of a low-pitched nature, such as a Tibetan bowl, a drum, etc. There will be several repetitions.
- Vibration: a vibratory sensation will be presented to the person using an element that generates this sensation, such as an electric toothbrush or any other object that vibrates. Several repetitions will be carried out.

Tactile Sensory Assessment: in this assessment, it is important that the person feels comfortable and safe, to avoid causing them discomfort. This assessment should be performed directly on the skin, on the upper extremities (arms and hands) and on the lower extremities (legs and feet), provided that the person accepts it. In some cases, if the person accepts it readily, we might assess their reaction to tactile stimulus on the face and head and on any other part of the body, such as the trunk; however, normally only the upper and lower extremities are assessed, since the person feels more comfortable with this and the procedure is less invasive. For the extremities we differentiate between the two hemibodies (right and left). This information is significant for some patients, since, due to certain neurological disorders, they might present different tactile sensitivity on one half of the body and the other.

The tactile stimuli that we present are: temperature, texture, and pain.

- Warm stimulus: a stimulus that warms the person but not excessively. For example, a material that can be heated in the microwave such as seeds placed in a sachet or other objects that generates heat, such as a hair dryer.
- Cold stimulus: a stimulus that is cold, such as ice cubes wrapped in a cloth.
- Soft stimulus: a stimulus with a soft texture, such as a soft fabric, a sponge, cotton wool etc.
- Rough stimulus: a stimulus that is rough or coarse, such as a scouring pad, a strong bristle brush, a rope mitt etc.
- Sharp stimulus: a sharp instrument, such as a needle, pricks different points on the person's skin.

We therefore observe the responses of the person to varied temperatures, varied textures, and pressures on different parts of the skin.

Proprioceptive Sensory Assessment: the good positioning or comfort of the person is important in this assessment. The person might be stretched out on a bed, in a comfortable chair, on a mat, etc. It is important to adapt to his/her postural control, and to try to perform the assessment as reliably as possible.

We assess proprioception in the upper and lower extremities. If the person accepts it, we can also try to apply pressure to the head and trunk; however, often, the head and trunk are too invasive, and we limit ourselves to the extremities. We assess both hemibodies. In this sense, it is important to observe if there are responses of pleasure or rejection

depending on laterality. We are interested in assessing whether the person feels pain in certain parts of their body.

The proprioceptive assessment is performed by applying firm pressure on each limb at a slow pace and repeating the procedure on each limb between three and five times. The sequence is:

Upper limbs:

- Shoulder, arm, elbow, forearm, wrist, and hand.

Lower limbs:

- Hip, thigh, knee, leg, ankle, and foot.

We repeat the procedure at a slow pace, applying firm pressure in the aforementioned sequences, repeating them at least five times, and always looking out for responses of acceptance or rejection from the person. If he/she has verbal communication, we also ask him/her directly whether the stimulus is pleasant or unpleasant.

Olfactory and gustatory assessment: the assessment of preferences and capacities for olfactory and gustatory sensory discrimination is essential in our day-to-day life. To assess this sense, varied and contrasting sensory sensations in terms of smell and taste are provided. We try to observe which sensations the person prefers, which sensations he/she dislikes, and we observe, in particular, whether he/she can identify what should be unpleasant stimuli so that in everyday situations, he/she is able to discern harmful stimuli or those that might affect their well-being.

Olfactory sensory evaluation stimuli: we present various and contrasting olfactory stimuli to the person and observe his/her responses.

Possible olfactory stimuli to present:

- Floral, spicy, acidic, sweet, unpleasant smells.

Taste sensory evaluation stimuli: we will present different flavours to be tasted by the person. The aim is to present various contrasting flavours in order to observe the responses of the person to different sensations, and to record their taste preferences and dislikes.

Possible taste stimuli to present:

- Salt, sugar, bitter taste, sour taste etc.

Vestibular sensory evaluation: assessing the responses of acceptance or rejection of the person when presented with various vestibular sensory sensations is important in order to offer him/her the most appropriate care and day-to-day activities for their well-being. In this sense, it is necessary to apply the vestibular inputs gradually, always observing the verbal and, above all, non-verbal responses, such as nystagmus (rapid and involuntary movements of the eyes that can be: from one side to another (Horizontal nystagmus); up and down (vertical nystagmus); or rotating (rotational or torsional nystagmus, skin coloration, etc).

The vestibular assessment can be carried out in different contexts, depending on the materials available. If we have one, we can perform the assessment in a vestibulator. If not, we can do it on a swing. With adults, if we do not have the aforementioned elements, it can be performed in a wheelchair, in a crane, on a seesaw, or in an office chair with wheels.

The aim is to present various vestibular movements and to observe the person's responses to them. It is very important to proceed cautiously, always looking at the person's eyes and face for signs of discomfort or overstimulation.

Experimental situations to assess the person's response to vestibular sensations:

- Response to linear acceleration: five swings in the frontal plane are performed, followed by five swings in the sagittal plane.
- Response to angular acceleration: five clockwise turns are made, followed by five anticlockwise turns.
- Responses to vertical acceleration: five vertical jump movements are performed, for example, on a raised mat.
- Response to inversion: the patient is turned upside down three-five times.

The final two situations (vertical acceleration and inversion) are only carried out with children.

Once the Sensory Assessment has been carried out, a Sensory Profile is prepared. This document, explained in section 2, summarizes the most significant results in terms of the person's positive and/or negative response when exposed to each of the sensory sensations, and a description of the response that the person emits. The Sensory Profile, therefore, is a document in which we synthesize the person's preferences or dislikes and describe his/her responses to them. From this document, the sensory objectives on which to work with the person can be established. These objectives involve recommendations for daily life that should provide a more pleasant daily life with greater emotional well-being for the person. In addition, they will serve as a guideline for multisensory activities appropriate to the person and, especially, they will indicate the objectives to be developed in sessions in the Snoezelen room.

Examples of the repercussion of sensory profile results on everyday life

In this section we will provide examples of Sensory Assessments and Profiles, and how they might generate 24-hour Snoezelen objectives and proposals for interventions in the Snoezelen Room. The improvement in Quality of Life of the person and in their Emotional Well-being is clearly demonstrated. Only the most important results that generated a significant change are included, rather than verbatim sensory assessments.

Older person with cognitive impairment

A 100-year-old lady with a level II Dependency, who lives at home with home support and has significant health problems in terms of low weight (37 kilos) and a refusal to take protein and vitamin supplements recommended by her doctor (due to the fact that she is a naturopath and only ingests natural foods, without additives or preservatives). In addition, she has behavioural problems in that she rejects clothes that the home caregivers offer her.

- Visual sensory evaluation: she prefers bright colours, declaring that she hates dark colours such as brown and grey. Based on this assessment, the colours of her clothes were changed. She was offered clothing in more brighter colours, which led to the end of behavioural difficulties when dressing her.
- Olfactory sensory evaluation: she likes the smell of vanilla. As a result, the social worker bought a natural vitamin supplement with a vanilla aroma from the pharmacy. She took it willingly and in a few weeks gained three kilos in weight, improving her overall health.

10-year-old girl with Autism Spectrum Disorder

A person with ASD and severe intellectual disability, without verbal language and with behavioural problems (rejection, yelling, and hetero-aggression) at school and in daily activities at home, such as showering.

- Touch sensory evaluation: she has a preference for cold temperatures, showing a clear rejection of warmer temperatures. She demonstrates a preference for coarse textures over soft textures. Based on this assessment, it was recommended that the family shower her with cold water, using a rough sponge. Subsequently, rejection behaviours in the shower were clearly reduced.
- Auditory sensory evaluation: rejection responses to high intensity sounds were clearly observed in the sensory evaluation, regarding both the human voice and low- and high-pitched sounds. In classroom situations with loud noise or disturbance from other classmates involving shouting or a high tone of voice, the teacher was advised to invite the girl to another calmer classroom space. In this way, behavioural disturbances in the school classroom were reduced.

Challenges and conclusions

The Sensory Profile presented here should be regarded as a tool for qualitative observation, available to professionals who require clear and reliable knowledge of the responses of children and adults for whom they should plan and carry out an intervention on a sensory basis. Mention has been made of the possible bias that may be implicit in the presented tool, since it is an observational instrument. The evidence from the many professionals from different caring fields (teachers, occupational therapists, psychologists, physiotherapists, etc.) who have used the Sensory Profile and Sensory Assessment is that it results in a better knowledge of the patient, and above all, a better understanding of his/her behaviour and emotions.

It is important that there be two professionals when performing the Sensory Assessment. As mentioned above, one presents the stimuli, and is in direct contact with the person, while the other has a more discreet role as the observer who records the responses of the person to different sensations. It is important after the sensory evaluation that both professionals analyse and review the results so that a sensory profile can be created

with the highest possible reliability, in order to offer intervention objectives appropriate to the needs and abilities of the person; thereby improving relationships, activities of daily living, and activity scheduling.

The observational tool presented in this article can be a good complement to other standardized tests such as Dunn's Sensory Profile. On the one hand, the structured observation presented in this article allows us to collect responses in an "experimental situation", whereas Dunn's sensory profile collects information from parents and teachers in everyday contexts. In both cases, we start from an ecological model and positive psychology, taking account of the environment and strengths (in terms of the abilities and preferences) of the person.

It is intended to provide professionals with a means to a deeper understanding of the people to whom they should direct their attention and care. We regard this tool as a starting document used by many professionals with concrete results in interventions that have resulted in clear improvements in the day-to-day life of patients in general terms and in terms of the design of sessions in the Snoezelen Room.

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OF STIMULI AND METAPHORS: THERAPEUTIC STORYTELLING (FAIRY TALE THERAPY) IN THE SNOEZELLEN ROOM

Agnieszka Smrokowska-Reichmann

Abstract

There are clear commonalities between the Snoezelen method and therapeutic storytelling (fairy tale therapy). When conducting fairy tale therapy in a Snoezelen room, we deal with the synergetic effect of sensory stimuli (characteristic of Snoezelen) and imaginary stimuli (characteristic of fairy tale therapy). Both the symbolic space of a fairy tale and the sensory space of Snoezelen constitute a „different“ world. Each type of art therapy, including bibliotherapy and the fairy tale therapy it contains, affect the senses, thus supporting sensory memory. The article analyses the theoretical and practical aspects of conducting fairy tale therapy in a Snoezelen room with children and with adults.

Keywords

Snoezelen, therapeutic storytelling, fairy tale therapy, sensory stimuli, bibliotherapy.

Comparison between Snoezelen therapy and fairy tale therapy

There are clear commonalities between Snoezelen therapy and the therapeutic use of fairy tales. When conducting fairy tale therapy in the Snoezelen Room, we are dealing with the synergistic effect of sensory stimuli (characteristic of Snoezelen therapy) and imaginative stimuli (characteristic of fairy tale therapy). (Bera, 2017). This is not surprising, since each type of art therapy (including bibliotherapy and fairy-tale therapy) affects the senses, thereby supporting sensory memory (Modrak 2016).

The comparative analysis of Snoezelen sessions and fairy tale therapy for children (proposed by Alicja Bera) can be reduced to the following points:

1. Both the symbolic space of fairy tales and the sensory space of Snoezelen constitute a „different“ world, which children relate to in a special way, precisely because it differs significantly from the everyday reality surrounding them.

2. In the Snoezelen Room, there is a wealth of sensory stimuli; while fairy tale therapy presents a wide range of imaginative stimuli.
3. In fairy tale therapy, an individual approach to the participant is extremely important, e.g., the choice of a favourite text of the child (to produce greater therapeutic effects). In the Snoezelen Room there is also a maximally individualized approach towards the participant, manifested by, for example, the appropriate selection of stimuli, guaranteed by the methodological principles of Snoezelen.
4. During both fairy tale therapy and Snoezelen therapy, it is essential to maintain control over the session. In the case of fairy tale therapy, the therapist must vet the content according to the age, level of development, and health of the participants. In the Snoezelen Room, the therapist must select the stimuli according to the health condition of a particular participant and their level of fitness and development, and must also take possible contraindications into account.
5. Both the person conducting the fairy tale therapy and the person conducting the Snoezelen session must be creative and responsive. Fairy tale therapy sessions and sessions in the Snoezelen Room make high demands of the therapist, since neither can be run according to a precise plan.
6. Another common feature of fairy tale therapy and sessions in the Snoezelen Room is their positive appeal to the recipient.

(Bera, 2017; see also: Rawa-Kochanowska, Zawadzka 2015, Głodkowska 2001, Konieczna 2005, Molicka 2011, Szaga 2014).

The general observations above encourage reflection on some of the more detailed aspects of fairy tale therapy in relation to Snoezelen therapy.

Imagination – creativity – development

Originally, fairy tales were not only intended for children. From the dawn of human history, such narratives have expressed the human longing for happiness, the approval of good, the condemnation of evil, and the affirmation of justice. They prove the power of human imagination and creativity, and, at the same time, stimulate emotional and intellectual development. For these reasons, fairy tales are highly valued and constantly revisited in psychology and pedagogy. In the world of fairy tales, on one hand, the impossible becomes possible and there are no problems without a solution, but on the other hand, the heroes encounter various difficulties and dangers, which they must strive to overcome. Properly selected and presented during fairy tale sessions, narratives can be soothing and therapeutic, since they show how to surmount obstacles, how to actively confront unfavourable circumstances, and how to find confidence in oneself and one's competences. It is also worth noting that if the fairy tale therapy session is conducted correctly, the therapeutic potential of fairy tales is activated naturally, as if "by accident". Imagination, creativity, development, overcoming obstacles, soothing, developing competences – such terms can also be applied to Snoezelen therapy. Similarly to fairy

tale therapy, in the Snoezelen Room the therapeutic effects happen „by themselves“, as if „by accident“ – provided the person conducting the session scrupulously follows all eight methodological principles of Snoezelen. In general, both fairy tale therapy and Snoezelen sessions are about activating positive emotional, cognitive, and social processes. The narrative, although it does not require an immediate and precise response, is nevertheless an unambiguous stimulus, capable of generating a wide spectrum of reactions, and is, thus, an effective way to galvanize the listener. The same can be said for sessions in the Snoezelen Room, except that in this case the activating factor is not the words (or not only the words), but (also) various types of sensory stimuli.

The role of the therapist

Preparation for both fairy tale therapy and Snoezelen sessions first requires sensitization of the therapist. In Snoezelen therapy it can be done, for instance, by visualization, as proposed by Hulsegge and Verheul, and by the therapists experiencing the Snoezelen space for themselves before taking their first patients into the Snoezelen Room. The sensitization of Snoezelen therapists has been codified as part of the code of correct fundamental attitudes and supervision (Hulsegge, Verheul, 1986). In the case of those conducting fairy-tale therapy, sensitization training is taken, which may, for example, take the form of an exercise known as “experiencing” fairy tales (see Kallen, 1999). The stages of such training might be as follows:

1. After reading the fairy tale, the therapist decides which character he/she most identifies with (whether a major or a minor character).
2. The therapist uses his/her own words to tell the fairy tale, and attempts to create a vivid and realistic narrative. The present tense is used.
3. The therapist makes a list of characters, creatures, and things that play a role in the fairy tale.
4. The therapist in turn tries to empathize with each of the characters listed on the list (auxiliary questions: What does the character feel? What do they want? What are their plans?).
5. The therapist outlines conflicts and tensions between the characters (auxiliary questions: Who seems to be the most powerful being? Who dominates? Who is [apparently] the least important?).
6. The therapist tries to come up with solutions other than that proposed in the fairy tale.
7. The therapist tries to answer the following questions: Does this fairy tale reflect any part of my life? Does it say anything about my situation, my problems? Does it outline a course of action with which I agree?

As we can see, although the leading of Snoezelen therapy sessions and fairy tale therapy sessions may seem simple, straightforward, and even fun in the eyes of non-professionals – in reality, it places high demands on the therapist and must be meticulously prepared for.

The role of the text and space

Both fairy tale sessions and Snoezelen sessions involve not so much a dialogue as a triologue. In the case of fairy tale therapy, the parties are: the participants – the therapist – the text (since the text also „works“ on the listener and „demands“ a response – it is „alive“). In the case of Snoezelen therapy, the parties are: the participant – the therapist – the Snoezelen space (i.e., the equipment, their arrangement, and the stimulation produced by them). A well-arranged and well-equipped Snoezelen Room also „works“ on the participant, „demands“ a reaction from him/her, and resembles a „living organism“.

Like fairy tales, the concept of Snoezelen is the product of human imagination and creativity. At the same time (again, like fairy tale therapy) Snoezelen therapy awakens the imagination and creativity of the participants of the session. In younger participants of fairy tale therapy, stories often evoke surprise, enchantment, and delight – the very reactions that occur in those who enter the Snoezelen Room for the first time. The only difference is that enchantment with the Snoezelen Room may occur not only in children, but also in adults. One of my students exclaimed: „It’s like Narnia in here!“ when he entered Snoezelen Room for the first time; this spontaneous statement from a young adult perfectly illustrates how close the „other world“ of Snoezelen is to the world of fairy tales.

The role of the text in fairy-tale therapy, and the space in Snoezelen therapy are also important since both text and space constitute a medium that facilitates communication with a person with whom communication is difficult – mainly small children, but also people with limited intellectual abilities. Both the text of the fairy tale and the multisensory space of the Snoezelen Room become a kind of transmission belt, used to convey a message that, in a different form, the addressee would not be able to assimilate or would not fully understand. However, there is another very significant common feature between the fairy tale text and the Snoezelen space. The basic requirement for a therapeutic text is that it should arouse the child’s curiosity (as well as being entertaining and enjoyable for them). The fairy tale must, therefore, be well told – the narrative should be lively, fast paced, and should appeal to the child’s imagination. It is important that the child does not become bored during fairy tale therapy, and the same applies to Snoezelen therapy. The space of the Snoezelen Room, the type of stimuli, and the way they are provided should also be attractive, entertaining, and enjoyable for the child. Therefore, it is important to not only conduct free Snoezelen sessions, but also to skilfully prepare and conduct thematic sessions and sessions based on a scenario. The Snoezelen Room should surprise the child again and again, just as new fairy tales continue to surprise them during fairy tale therapy sessions. By conducting fairy-tale therapy in the Snoezelen Room, the therapist’s task is somewhat easier, since the multisensory space of the Snoezelen Room makes the narrative more attractive, and the narrative, in turn, can serve as the guiding motif for the scenario.

Opinion is divided on whether the texts during fairy tale therapy should be simply read by the therapist or told. Generally speaking, a story is better when told than read;

nevertheless, a well-read story is better than a badly-told one. The text of the fairy tale may need to be repeated in subsequent sessions, for various reasons. It is important to remember that what matters most is the fidelity and accuracy of the repeated text, especially with children and seniors with cognitive problems, since listening to what is already known creates a sense of security in these participants. Therefore, if the therapist is not sure whether he/she will be able to tell a story in the same (or very similar) way for a second or third time, it is better for him/her to read it. Here the question arises of which voice to tell (or read) the story in. The voice of the therapist during both fairy tale therapy and Snoezelen therapy is essential (although this is a topic for further analysis). As far as fairy tale therapy itself is concerned, the therapist's voice should convince the participant that the fairy tale impresses the therapist himself/herself, that he/she is in some way moved by it. In relation to Snoezelen therapy, the principle of the correct attitude implies the therapist's need for full involvement in the world of Snoezelen. Excessive changes in voice are strongly discouraged. It is very easy to overdo the effect, with unintentionally comic results. The story should not be told (read) in an overly suggestive manner; as in Snoezelen therapy, the voice of the fairy-tale therapist must be more or less neutral to better reflect the statements of the characters appearing in the fairy tale, and to allow participants the space to interpret and react to the narrative freely. In both fairy tale therapy and Snoezelen therapy, the therapist must avoid imposing his/her opinion or attitude on the participant – it is the text and the multisensory space that should „work“ on the participant.

The metaphors and symbolism of fairy tales, and the therapist's withdrawal from a dominant role may make it difficult to characterise fairy tale therapy as an intervention, which can also be the case with Snoezelen therapy. Of course, some clearly formulated rules apply to both fairy-tale therapy and Snoezelen. In both cases, the therapist maintains the role of organizer of activities, in the sense that he/she presents various options to patients and provides certain directions. However, in both fairy tale therapy and Snoezelen the participant's autonomy should not be restricted.

Integrating fairy tale therapy in Snoezelen classes with children and seniors

Most of the fairy tales used in fairy tale therapy can be divided into three acts. This simple scheme makes it easy to integrate fairy tale therapy into scenarios in the Snoezelen Room:

- Act one, the introduction, takes place in a fairy-tale world, but it is also possible to meet its elements in reality; for example, a family consisting of a mother, father, and children is common to fairy tales and everyday life.
- Act two clearly plays out in an area of symbolism and magic; for example, one of the children is turned into an animal by a magic spell, and special actions are required to break the spell and to return the child to his/her true form.
- Act three is the ending, in which a happy solution is found, and the situation of the heroes is as good if not better than at the beginning.

The Snoezelen Room provides the right conditions and opportunities to illustrate these stages, using Snoezelen equipment and devices, as well as additional items brought to the Snoezelen Room specially for a particular scenario. Illustrations play an important role in fairy tale books for children. The Snoezelen Room can act as a giant illustration into which the children physically enter and experience the fairy tale. The length of the average session of fairy tale therapy and Snoezelen therapy for children is also similar, at about 30 minutes.

Psychologists and psychotherapists emphasize that the strength of fairy tales lies in their deep understanding of the various stages of life and the problems that are typical of these stages. Attention should be given to the special messages of fairy tales concerning not only the world of children, but also the world of adults. For example, long before ideas of emancipation and equal rights, fairy tales told stories of women taking on the fate of their family and even their country. A woman in a fairy-tale world is not the "weaker sex" at all, and her biological features do not negatively determine her. On the contrary, the heroines of fairy tales can make superhuman efforts and achieve goals that are beyond others. It can even be said that in fairy tales the roles and possibilities of a woman are presented even more comprehensively than the roles and possibilities of a man. Girlfriend, beloved, wife, mother, stepmother, sister, daughter, queen, fairy, witch, mother-in-law, mermaid, etc. – these good (and sometimes bad) women shape the fate of others, and they decisively follow their own path in life.

These and similar aspects of fairy tales explain why suitably adapted fairy tale therapy can also be used when working with adults (e.g., in psychotherapy). Snoezelen therapy is also open to adults, including the elderly.

Indeed, seniors respond extremely well both to fairy tale therapy sessions and Snoezelen therapy sessions. They may be cognitively able seniors, but also seniors with pre-dementia or dementia. Of course, sessions in the Snoezelen Room with seniors (cognitively able, or suffering from forms of dementia) are a subject deserving separate consideration. However, with regard to fairy tale therapy with seniors, we should note that they willingly listen to „classics“, that is, well-known fairy tales that they knew during their childhood, and perhaps told their own children and grandchildren. It is best to choose stories that are just over ten minutes long, so that even seniors with cognitive limitations will most likely maintain concentration throughout the entire duration of the piece and can grasp the entire message. If the fairy tale is longer, it is advisable to introduce breaks (e.g., for music, singing together, other sensory stimuli, such as taste stimuli, or conversations about a fragment of the story already heard), particularly for seniors with dementia.

Seniors have a long experience of life, and since they have already fulfilled most of the basic goals in life, there is no need to attempt to specially form or correct anything in these people. Therefore, in fairy tale therapy with this group of recipients, we can set slightly less „serious“ goals. It is worth trying to find texts that create a good mood and make the participants smile or even laugh. After all, old age is often a period in which we experience loss, the repertoire of our behaviours narrows, and our health worsens; therefore, good humour produced in the Snoezelen Room is therapeutic in the full sense of the word. On the other hand, many seniors also expect deeper texts that can reference their wisdom from life, their own opinions, and other autobiographical aspects.

In the Snoezelen Room, there are optimal conditions for conducting both the first and the second variant of fairy tale therapy with the elderly.

For the purposes of fairy tale therapy conducted in the Snoezelen Room, the therapist can compose his/her own texts, but he/she can also use classic fairy tales. Depending on the group of participants i.e., children or seniors, different layers of meaning can be revealed. Below, is an example of such use of a fairy tale: „Candles“ by Hans Christian Andersen.

Possible additional accessories:

- candles (for safety reasons in lantern form, i.e., closed inside a housing; lanterns marked to differentiate „better“ and „worse“ candles)
- a wicker basket
- apples
- potatoes baked in their jackets
- bows and ribbons
- „sewing“ materials (for safety reasons, no needles and threads – only make-believe materials)
- shiny aluminium foil, spotlights, LED lamps (to create the glow that permeates this fairy tale)

Possible use of Snoezelen equipment:

- hanging optic fibres to represent the ballroom walls (colour setting: white and yellow)
- light-and-sound track as the floor of the ballroom
- optic fibres spread on the floor, covered with transparent tulle in white and gold (ballroom floor)
- bubble tubes in yellow (to represent the glow of the candles in the ballroom)
- CD recordings: e.g., a waltz
- low pouffes/seats in a darker corner of the Snoezelen Room (to represent the poor widow’s flat)

With children, the focus of the session will be:

- the depiction of a candle as the „narrator“ (a fairy-tale candle that speaks; perhaps it is magic?)
- role playing, dancing, cooperation in a group
- emphasizing messages such as: children finding equal joy in very different things, love between siblings, love between a mother and her children

With seniors, the focus of the session will be:

- interpretation of the symbolic layer of the fairy tale
- speaking about concepts such as justice, love, fulfilment, self-realization, sacrifice, happiness
- elements of autobiographical work, e.g., difficult, but also beautiful memories from one’s own childhood, differences in living standards

Possibilities of multisensory stimulation in both cases:

- visual stimuli
- auditory stimuli
- tactile stimuli
- taste and olfactory stimuli.

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	EXAMPLE OF GOOD PRACTICE	
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SNOEZELLEN AND DEMENTIA: A CASE STUDY

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Abstract

From the model of quality of life and person-centered care (Kitwood, 1997), we present a case study with the aim of evaluating the benefit of Snoezelen multisensory stimulation (SMS) in an 88-year-old subject with unspecified dementia, GDS6, and recurrent depressive disorder. For this purpose, a pretest-posttest design was chosen, with an intervention consisting of one weekly Snoezelen session for five weeks. To assess the effects of the intervention, a record of the physiological and behavioral profile of the person was used. The results include both the immediate effects of SMS and those after two hours. In conclusion, the Snoezelen intervention produced immediate and short-term benefits in terms of connection with the environment and behavioral adjustment in an elderly patient with advanced dementia.

Keywords

Snoezelen, dementia, person – centered care, multisensory stimulation, psychological and behavioral profile, intervention.

Introduction

Dementia is one of the most common health problems in older people. The WHO (2015 in ICD – 2010) estimates that it affects 50 million people in the world, and in the future the trend will increase to 80 million by 2030 and 152 million by 2050. The most advanced stage of this neurodegenerative disease is characterized by cognitive and functional impairment, with behavioral alterations. This results in a deterioration in the quality of life of sufferers and is a major stressor for their caregivers.

Currently, non-pharmacological therapies (NPTs) are used as a complementary or alternative approach in interventions targeted at people with dementia. Snoezelen multisensory stimulation (SMS) is included in this type of therapy. SMS began

in the Netherlands in the 1970s, and was first described by Hulsegge and Verhuel, (cited in Cid, 2010) in adults with severe disabilities. Currently, the Snoezelen intervention is applied in a wide variety of health problems, helping patients to improve their overall adaptation cognitively, physically, emotionally, and behaviorally (Cid, 2012).

In people with moderate to severe dementia, its benefits in terms of adaptive behavior have been demonstrated by increased patient well-being and quality of life (Sposito et al., 2016; Maseda et al. 2018,). Aznar-Calvo et al. (2019) describe the implementation of multisensory stimulation programs in Snoezelen rooms in people with dementia as a strategy to improve involvement and connection with the environment, in addition to reducing psychological and behavioral symptoms.

The methodology of intervention in Snoezelen rooms is included in the paradigm of Person-Centered Care (PCC) for dementia (Kitwood, 1997). Kitwood stresses the importance of empathizing with the subject and their needs and promoting their autonomy for as long as possible. PCC is, thus, a new way of understanding professional care, which aims to provide comprehensive personalized care. Jakob and Collier (2017) found that the characteristics professionals associated with a successful and effective Snoezelen space for people with dementia were: comfort, safety, meaningfulness of activities consistent with patient age, a relaxing sensory experience, a sense of control, and interaction to the greatest possible extent. In this regard, knowledge of the pleasant sensory experiences' patients have had throughout their life becomes a basic instrument (senso-biography: annex 3).

Regarding the presentation of stimuli, significant environmental immersion, including different sensory inputs, is one of the greatest potentialities of the Snoezelen room. In this sense, recent studies have investigated combinations of sensory inputs; for example, Flavian (2020) in a study on a young population, concludes that the addition of pleasant ambient scents congruent with audiovisual stimuli improves affective and behavioral responses.

We present a single case study as an example of SMS intervention in advanced dementia. As a qualitative study, it allows us to deepen our understanding of the behavior of a person as a whole and to give meaning to their world of relationship interactions with people, their motivations, and more (Fernández, 1999 in Pelekais, 2000).

First, an overview of the case at the beginning of the intervention is provided. To collect this information, two previous coordination meetings were held between professionals from the nursing home and the Snoezelen room. This is followed by the objectives that were set, the design, the intervention itself, and evaluation of the results.

Case description

The study involved an 88-year-old woman (M), who had been living in a nursing home for two years at the time of the intervention. In terms of biographical details, she was born in a large city, where she lived until adulthood. She studied until the age of 12 and dedicated her life to embroidery and helping the family run a grocery store. When

the store closed, she took care of her nephews. She lived with her parents first, and then with her sister. When she was older, she moved to another city, where she lived with her niece until she entered the nursing home. Nowadays, she receives regular visits from her nieces and nephews, and they are her current family support.

The occupational therapist informed us that at first, M had had difficulty adapting to the residence, with recurrent episodes of anxiety that she continues to show today; in addition to considerable emotional dependence on family members and professionals. Her characteristics include persistent motor ambulation, with high risk of fall due to gait instability. She requires individualized attention, both to perform activities of daily living (ADL) and to regulate her emotional state and level of involvement.

In terms of physical health, she has arterial hypertension (controlled with medication), osteoporosis with bilateral knee replacement surgery, acquired hypothyroidism, insomnia, inguinal hernia, cataracts, and bilateral hypoacusis.

The diagnoses of interest for our study are, on the one hand, unspecified dementia (ICD-10), GDS 6 with severe cognitive impairment (in the last year she has gone from a score of 15 in the MEC to a score of 0). In terms of mental health, she has panic disorder without agoraphobia, recurrent depressive disorder with a high level of anxiety (a score of 12 on the Cornell scale) and NPI (Cummings Neuropsychiatric Inventory) score of 28. The high level of anxiety manifests itself in compulsive wandering without specific purpose, and continuous agitation. Her state of alertness fluctuates, presenting as difficulty in paying attention and responding to her environment. Her score in the Cohen-Mansfield Inventory of Agitation and Cognitive Impairment (CMAI) is 44, indicating verbal aggressiveness, constant demand for help, negativistic attitude, and complaints. He takes antidepressant and anxiolytic medication.

Regarding her senso-biography (information about her sensory preferences), M prefers tactile stimuli, especially those that have smooth and soft properties. She markedly seeks contact with people (possibly related to the dependence mentioned previously, since this may provide the security that she craves). She likes to feel welcomed and enveloped on a physical level, both by the embrace of people and by objects such as blankets and cushions. She prefers warm temperatures to cold. On a vestibular level, he finds rocking and certain smells pleasant, especially cosmetic products such as creams and perfumes, or drinks such as coffee. On an auditory level, she enjoys listening to music from her youth. The visual stimuli that interest her are autobiographically associated with her city, trips, and pleasant experiences with family members.

Once the initial assessment had been made, it was determined that the problems which caused the most overload among nursing home professionals and relatives, were the high level of agitation and anxiety that M presented, and her lack of involvement in the environment around her.

Objectives of the intervention in the Snoezelen room

The general objectives of the Interdisciplinary Program of Individual Attention (IPAI) proposed by the professional team at the nursing home were:

- To regulate alertness
- To reduce the level of agitation and anxiety

Regarding the intervention in the Snoezelen room, the specific objectives agreed upon were:

1. To improve connection to the environment:
 - fostering communication by promoting autobiographical memory processes through reminiscence
 - increasing autonomy and participation
2. To reduce the level of agitation and anxiety:
 - by means of relaxation

Design of the Snoezelen Room Intervention

A mixed research design was used, combining quantitative and qualitative methodologies. A unique case design of repeated measures, it included a post-test pre-test assessment. Physiological records and observational behavioral records were used for the evaluation. At the physiological level, the level of blood oxygen was recorded with a finger pulse meter (with a percentage of between 90 %–99 % considered adequate), and the heart rate was recorded in beats per minute (with normal frequency considered at between 50–100 beats per minute). Blood pressure was also recorded (with normal frequency considered to be between 8–12 points). During the sessions, a total of seven items were recorded in the behavioral profile: level of emotional well-being, level of relaxation, level of attention, level of communication, and level of motivation with Likert-type scores from 1 to 3 (see annex 2). Finally, post-intervention behavior was recorded after two hours, i.e., during the midday meal in the nursing home. The recording was carried out by a geriatric care provider, who had no knowledge of the intervention.

The first two sessions in the room with M were aimed at familiarizing her with its elements and establishing a sensory assessment according to the observational register proposed by Cid (2010) (see annex 1). This would allow us to choose sensory stimuli appropriate to her preferences and needs. Ten weekly sessions in the Snoezelen room were planned, from 11 a.m. to 11.45 a.m., accompanied by the occupational therapist (OT) of the nursing home. Due to health problems and the onset of the covid-19 pandemic, only five sessions were completed. In total, seven sessions with M were conducted non-consecutively over a period of three months, between January to March 2020.

The following is a summary of her sensory profile (which contrasts in places with the information obtained in the senso-biography): M had a positive reaction to and preference for visual stimuli in the form of images on the projection screen.

She preferred soft lighting to bright. She showed interest in the optical fibers. She had a positive response to direct touch with people with whom she was affectionately connected, and a preference for soft and smooth textures. She was attracted to auditory stimuli, especially music that was meaningful to her. She responded to smells (especially olfactory stimuli that were familiar to her) and gustatory stimuli (taking into account her remaining ability to swallow certain foods). Finally, M sought vestibular input through rocking herself when seated, and she willingly accepted being rocked by a professional, both on the waterbed and in the armchair.

Development of the intervention

To work on the Snoezelen room objectives (considering M's sensory preferences) we proposed:

Objective 1: stimulating communication by promoting autobiographical memory processes, using large screen projections of images reminiscent of her hometown and traditional festivals.

Objective 2: encouraging autonomy and participation, using the switchboard to make environmental changes, and to select content that appealed to her on the screen.

Objective 3: reducing anxiety levels through relaxation on the water bed, and tactile and vestibular stimulation through balancing, with the help of the therapist.

Each session consisted of three stages, the entrance ritual, the two phases of the session (i.e., relaxation and activation), and the closing ritual. The materials for the autobiographical memory activities included sewing paraphernalia (since her records suggested that she had sewn for a long time) and images, videos, and songs from traditional festivals of her city. In two of the five sessions, sewing paraphernalia was used, although in both cases the presented objects produced a negative response and aversion; therefore, we did not consider them able to evoke suitably positive memories for promoting well-being. From the images, videos and songs, M reacted particularly positively to the images (with relaxed facial expressions and vocalizations of pleasure in response to them); evidently, they were a way for M to connect with the environment. Thanks to this, we were able to work on her verbal communication with others, and the evocation of songs, observing a clear impact on her willingness to initiate communication.

In two of the five sessions, olfactory stimulation was used with smells that M was expected to find pleasant (aromatic plants, hand cream, cologne); a particularly positive reaction was observed in response to visual, tactile, olfactory, and gustatory stimulation from coffee.

Gradually, it was possible to encourage in M a participatory attitude and greater autonomy in the room – from stretching out on the bed with the OT, to stretching out and remaining calm when left alone in the 2nd session. M demonstrated an increased ability to interact with professionals, to express needs, and a willingness to try out new areas of the room (e.g., the armchair under the fiber shower, and elements such as the color switch), with the help of the therapist.

M using the color switch in the bubble tube



Regarding the intervention on anxiety, a first phase of relaxation was implemented in the five sessions, involving the waterbed and massage with moisturizing cream and soft textures. This produced a positive response, especially in areas of the body such as the face and hands. At a behavioral level, M became increasingly calmer in the room, and verbal expressions of needing to go to the toilet or to leave the room decreased. A feeling of calm and tranquility was observed two hours after the intervention in the Snoezelen room, at mealtime in the nursing home. The geriatric care worker observed a reduction in compulsive eating behavior, associated with the higher levels of calmness on days when M had been in the Snoezelen room. The results of the physiological and behavioral assessment are detailed below.

Results

In order to show objective data relating to level of anxiety (objective 3) and level of alertness during the sessions, Figure 1 displays the global values of the psychophysiological measurements pre-post session (except for the first session, in which the measurements could not be carried out, due to lack of cooperation).

A slight reduction was observed between pre- and post- session in the maximum and minimum blood pressure for all sessions. Oxygen levels remained above 90% saturation, and no significant pre-post changes were observed. Her heart rate in beats per minute had a tendency to increase slightly, possibly related to a higher level of alertness at the end of the session.

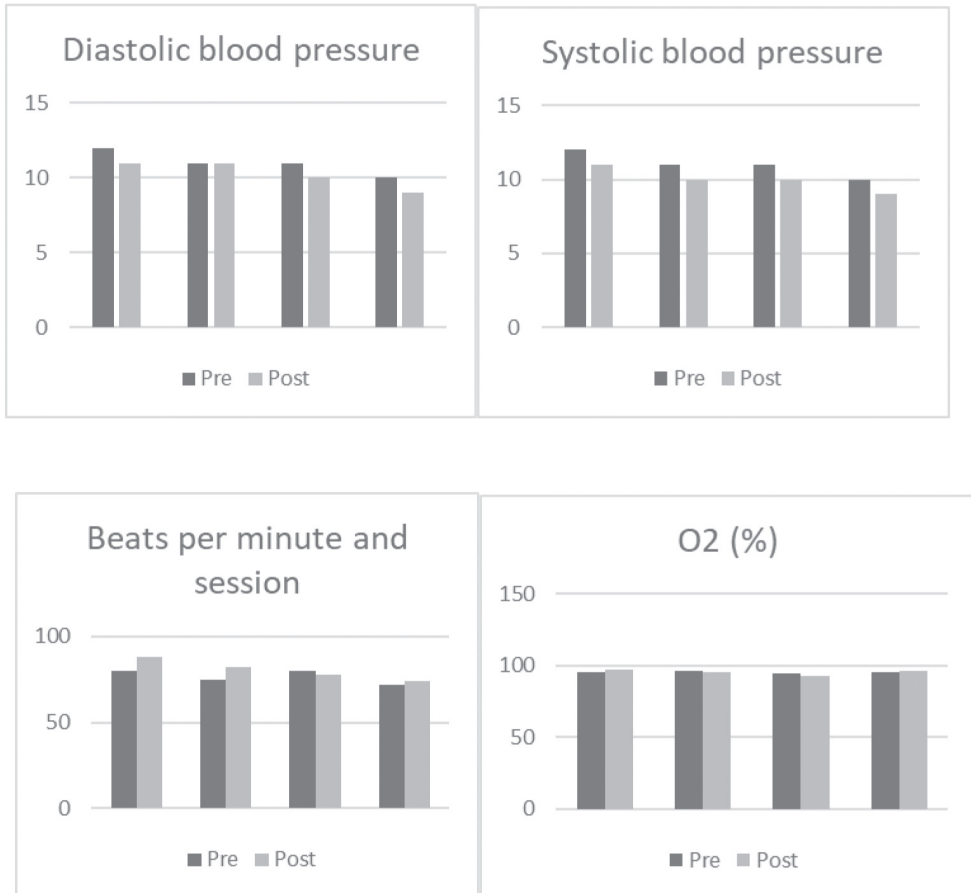
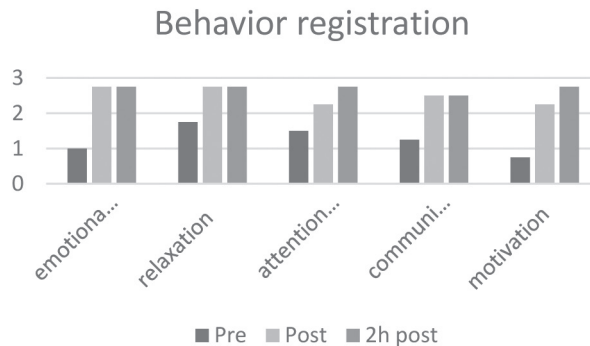
Figure 1: Physiological measurements

Figure 2 is a record of M's most notable general behaviors, pre-/post- session, and two hours post-session.

Figure 2: Measurements of pre-/post- and 2hrs post- session behaviors



Broadly speaking, an increase in emotional well-being, relaxation, attention, communication, and motivation is observed pre-post session. Two hours after the intervention in the Snoezelen room, the level of well-being, relaxation, and communication was maintained, and levels of attention and motivation had increased; although this increase may be partly explained by the activity that took place at this time: i.e., the midday meal. During the different sessions, there were changes in M's state of health, which may have influenced the prevalence of certain behaviors. However, we observed more adaptive behaviors as we worked with M in the room, with clear differences between the beginning of the first session, in which we met a nervous, anxious M, almost incapable of relaxing, and the last session, in which M was much calmer without needing to leave the room, and without constantly making demands on the therapist's attention.

Discussion of results

Regarding the first objective, it was very productive to work with reminiscence and autobiographical memory at a visual and auditory level. At the same time, these reminiscence activities made it easier for us to work on the other objectives. M was attentive to the screen, albeit discontinuously. We also observed how M's language became much clearer and more understandable during the projection of images, and she had a greater facility to find appropriate words.

In terms of the second objective (autonomy and participation), we observed progress in M's ability to move around the room on her own (without needing to hold the therapist's arm), and her interest in using a switch to change the lighting. Above all we noted a reduction in the physical need to have the therapist constantly beside her.

For the third objective (reduction of distress and anxiety through relaxation), the use of vestibular stimulation on the waterbed, together with tactile stimulation proved beneficial. Although at times M responded with reluctance to the stimuli, and showed displeasure, at a certain point a state of relaxation was achieved in all sessions, so that M could enjoy moments of calm with the help of the occupational therapist. Her levels of well-being, relaxation, and communication were maintained two hours after the intervention.

Conclusions

The results analyzed are in line with those observed by Sposito et al. (2016), Maseda et al. (2018) and Aznar-Calvo et al. (2019). Although the results were not statistically significant, the Snoezelen intervention in this case study was effective in: improving the level of M's connection with the environment (indicating the subject to be more cognitively active), reducing her level of anxiety, and adjusting her behavior after the sessions and in the short term. Therefore, it is evident that a subject with more severe cognitive impairment can respond positively to structured and sensorially stimulating environments, reducing the behavioral symptomatology of dementia.

Regarding the methodology, the Person-Centered Care model was confirmed as a principle of personalized comprehensive care in professional intervention. We agree with Jakob and Collier (2017) regarding the need for the meaningfulness of the activities linked to patients' life history, and the need to allow patients the fullest possible control over interaction in the room, in line with their abilities. Regarding the presentation of stimuli, we agree with Flavián (2020) that meaningful environmental immersion, including the various sensory inputs congruent with immersion, is a major potentiality of the Snoezelen room.

Obviously, from an experimental research design perspective with quantitative methods, a case study presents important limitations; however, the difficulty of working with large samples of people with advanced dementias (GDS6/7) due to their fragile overall state of health and behavioral problems should be kept in mind. For this reason, we decided on a complementary methodology, combining quantitative and qualitative aspects. The case study allowed us to study a particular situation in depth, in order to understand the development of a Snoezelen intervention and its potential benefits.

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Annexes

- (1) Assessment of M's sensory profile
- (2) Behavioral observational record
- (3) Information from M's senso-biography

(1) Assessment of M's Sensory Profile in the Snoezelen Room

Visual	In terms of reaction to and fixation on a luminous object, M has an ocular response to light, although light that is overly bright can irritate her, prompting an avoidance response. She keeps her gaze fixed, and does not visually track any of the light intensities.
auditory	M. showed no reaction to weak auditory stimuli, although she did react to strong stimuli, both from the human voice and music, which she tries to locate, and in the case of the human voice, is compelled to approach. We can relate her non-reaction to weak stimuli to auditory dysfunction, while her approaching of interlocutors and looking at them when they speak to her could be attributed to her need for physical contact and „protection“.
olfactory	In terms of olfactory stimuli, M. responded by approaching the scents. She showed a preference for the stimuli of coffee and chocolate, responding to them with pleasure; while we observed an indifference to mint, lavender and cologne (although cologne appears in her senso-biography as a smell she that likes).
taste	M. responded very positively to the taste stimuli of coffee and chocolate, seeming to want more. She does not like the sour taste of lemon, which causes her to close her eyes tightly. <i>*According to her senso-biography, she is reported to have been very keen on coffee and similar products, although, the occupational therapist observed that she drank coffee only sporadically.</i>
tactile	We obtained a negative response to aversive stimuli such as pressure or friction from rough materials. M. accepts soft blankets and cushions. She often seeks contact with people by holding their hands and arms when they are nearby; therefore, we consider contact with others to be a positive stimulus.
vestibular	We observed a slight positive response to frontal and lateral rocking. According to the information provided by the OT, she has a tendency to rock back and forth to relax, and does the same on the lap of the OT when she is nervous and agitated (this rocking is reminiscent of a mother rocking her child in her arms, providing protection and skin-to-skin contact to transmit a sense of security).
Proprioceptive	She showed no reaction to pressure applied for a few seconds to her arms and hips, although we observed a certain aversion when we passed a hand gently over her legs and feet. <i>* It should be noted that M has small wounds on the skin of her arms and legs, a fact that may cause a degree of sensitivity and aversion to touch there.</i>

2. Behavioral observational record (from Lazarus, 2009)

Emotional well-being	When a person shows signs of being at ease, expresses pleasure, enjoys bonding with other adults, and smiles
Adapted behaviors	Behaviors that do not distort one's functioning or interaction with others. Absence of self-harm, aggression towards adults, and destruction of objects
Degree of relaxation	A general state of stillness and calm, movements cease
Control of stereotypical movements	Decrease in the frequency of very repetitive, impulsive, rhythmic, self-stimulating, or self-soothing movements which have some utility for the individual
Attentional level	Attention span in the room, i.e., whether he/she focuses on what is being done; whether he/she constantly moves from one device to another; whether he/she seems restless or agitated
Level of communication	Whether the person shows interest in or interaction with others; whether he/she addresses others; whether he/she seeks visual, tactile, proprioceptive contact with others; whether he/she makes gestures of rapprochement, of seeking bodily contact, or gives warm looks
Level of motivation	Assessment of the internal state of the subject in relation to being in the multisensory room. Whether it is apparent he/she wants to go there; whether he/she is comfortable there; whether he/she shows interest in staying longer in the room

3. Sensio-biography

Tactile and Somatic Perception

- Side: right
- She prefers warm water for showering, natural water for drinking.
- She likes soft clothing textures; she rejects rough materials.
- She is not usually bothered by her clothes, but lately she becomes distressed if she wears too many clothes.
- She likes bodily contact very much and being touched. She enjoys intense hugs very much.
- She likes being touched most on her hands; she does not like being touched on the face very much.
- She likes to have her hair touched. She loves going to the hairdresser.
- She likes the hot air from hair dryers. She does not like fans.
- She likes to feel contact with soft natural elements, such as sand and grass.

Proprioception

- She likes walking very much, although she needs to be accompanied, due to problems with balance.
- She is currently denied this opportunity due to high risk of fall. When she is very agitated, she wears an abdominal restraint.
- She had always previously enjoyed swimming in a pool with friends and family, but it now seems to cause her more distress than pleasure.
- She has never played any sports, but she has always been very keen on watching football (on TV).
- The application of any strong pressure causes her pain.
- She does not like going barefoot indoors.
- She likes to cover herself up in bed, feeling enveloped. She does not usually move during the night.
- She does not use crutches or other supports to maintain her posture.
- No stereotypes appear.

Vestibular

- She likes gentle rocking very much; it calms and reassures her. She does not usually get dizzy.
- She usually sits with her legs parallel.
- At first, she showed reluctance, but she is beginning to tolerate it more and more.

Olfactory Perception

- She likes the scent of perfumes (e.g., DKNY).
- She shows no interest in flowers or their smells.
- She likes moisturizing creams (e.g., Nivea and an olive cream by Mercadona).
- She generally likes the smell of food (e.g., peaches and coffee).
- She has a good sense of smell.

Taste Perception

- She likes soups, potato tortillas, and chorizo. She rejects mashed/pureed foods.
- She prefers drinks at room temperature.
- She likes coffee with milk and tonic.
- She does not require help with feeding.

Auditory Perception

- Her hearing is becoming increasingly impaired. She frequently has ear wax blockages.
- She has always enjoyed listening to the radio.
- She likes anything connected with the royal family and celebrity gossip magazines.
- Musically, she likes zarzuela, folk songs, Luis Mariano, and Viennese Christmas concerts.

Visual Perception

- She likes to look at old family photographs.
- She likes to watch movies, although it is getting increasingly harder for her to concentrate on them and follow the story. Her favorites are: „Gone with the Wind“, and the musicals „The Sound of Music „, and „Mama Mia“. She also likes TV entertainment shows.
- She has never had a favorite color.
- She fondly remembers a trip to Madrid by train.
- M is more of a daytime person; she has always been an early riser. She finds it difficult to sleep at night.

HOLISTIC MUSIC THERAPY AS ONE OF THE PREVENTIVE ACTIVITIES IN PUPILS WITH PROBLEM BEHAVIOR

Irena Johanka Savková

Abstract

The paper provides insight into the implementation of music therapy activities within holistic music therapy. In its first part, it conveys theoretical information about holistic music therapy, which can be very flexibly applicable. In the second part, the author focuses on the application of music therapy in a special primary school environment with a target group of students with a combined disability and severe mental disability. It presents the forms, the course of lessons, the specifics of music therapy activities and a specific case study of the student, in which he describes the course of music therapy lessons. The last part of the paper consists of a description of the project of holistic music therapy for pupils with manifestations of problematic and risky behavior in the primary school in Bohumín and its evaluation.

Keywords

comprehensive music therapy, educational drumming, special primary school, pupils with problem behavior, project

Introduction

Music therapy in the Czech Republic can be considered a relatively young field. J. A. Komenský was the first important person to attach great importance to music in the upbringing of children. In his work *Informatorium for Kindergartens*, he recommends leading children to learn about melody, rhythm through music that is natural for humans. Nowadays, music therapy can be studied at universities. Knowledge and personal experience can be gained by attending seminars, educational programs organized by Czech music therapy associations and non-profit organizations. In the Czech Republic, we record various approaches to music therapy. Their origin was influenced by traditions, culture, music therapy foreign directions and other factors. Music therapy has a therapeutic

and therapeutic character, it is used in the field of health care, education, in the social sector and in non-profit organizations. It is impossible to say which approach is better or „the right one“, the course and subsequent influence of music therapy is influenced by a number of factors, the choice of form of music therapy, instruments, personality and experience of a music therapist. However, all approaches have a common goal: to comprehensively affect the development of the personality of the student, client, patient.

The article brings, among other things, the experience with the use of Holistic Music Therapy according to L. Holzer in the Kindergarten and primary school special Diakonie ČCE Ostrava. The mission of this school is the education of children and pupils with combined disabilities. These are combinations of mental disabilities with various forms of cerebral palsy, sensory impairments, autism, autistic traits. Most children here are fully immobile, non-communicating, verbally requiring the help of another person throughout the teaching. Some students have a tracheostomy and pegs. It is typical of L. Holzer's Holistic Music Therapy that natural tuning instruments are used, which have a positive effect on the human body. These are folk, ethnic, non-tempered instruments, rich in aliquots, eg drums, djembe, balafon, koshi bells, shanti chimes, rain stick, ocean drum, percussion instruments, frame drums, endings, fujars, twins, didgerida, gongs, Tibetan bowls, sansula, kalimba, squirrels, mouth harps, slit drums, udu, shruti box and more. An irreplaceable element here is the musical rhythmic instrument that we all have within us – the human voice. Aliquot singing, intuitive singing, voice tone color, accompaniment of playing instruments with a voice are used. No folk songs or lyrics are used, it is improvisation. He does not use reproduced music, guitar or piano. Pupils perceive the sounds of these instruments with all their senses. The vibrations they perceive during play through the largest sensory organ – through the skin, help them to realize their body as a whole, to feel their body „from within“, affects the internal organs and muscle tone.

Music therapy in special primary school

An active and receptive form of music therapy, individual and group, is implemented in the facilities of the special primary school. The form, space and instruments are chosen by the music therapist so that the course of music therapy is suitable for specific pupils or pupils, they must know his current state of health, mental state, individual approach is necessary.

During active music therapy, students are involved in playing instruments, the body, vocal expression, rhythmic movements of the body, limbs. In the receptive (listening) form, the children are suitably positioned and let the sounds of the instruments played by the music therapist play on them. Previously, this form of music therapy was mistakenly referred to as „passive“ because children do not play instruments. However, children perceive the stimuli offered and respond to them adequately, involving them in the process, by voice expression, rhythms.

The individual form of music therapy takes place in a separate multisensory room, in Snoezelen, which provides an undisturbed safe space, suitable lighting – dimming, is equipped with a sufficient number of positioning aids, musical instruments. Here, a music therapist devotes 30 to 60 minutes to one child. He chooses the time and choice of tools according to the individual needs of the child. The music therapist prepares the room – ventilation, preparation of instruments, positions the child so that the position is pleasant, safe for him, with the support of the head, or to the half-seat. Children try to watch where the sounds come from, sometimes they need to look at the music therapist. The increase in the upper part of the body allows them to do this, in addition it facilitates breathing and the possibility of vocal expression.

The group form of therapy takes place once a week according to the number of participating children and pedagogical staff either in multisensory rooms, in a spacious separate classroom, in a rehabilitation room, depending on the weather and in the school garden. It is essential that the space is large enough for all involved, does not restrict them in movement, playing, provide space for instruments, a quiet undisturbed and safe environment. Educators and children sit in a circle on chairs, in wheelchairs, on a positioning bag, in front of them they have a drum – djembe, tubano, drums with a mallet. The type of drum is chosen according to the child's motor skills. Some fully immobile students are positioned inside the circle. In the center of the circle is a menu area with percussion instruments. After the welcome, they play drums together under the guidance of a music therapist, create common rhythms, and vocalize. Children for whom drumming is impossible due to a disability play percussion instruments. A popular activity is not only joint drumming, but also the creation of a common rhythm, music within the so-called music therapy orchestra. Children and teachers will choose from the menu area the instrument they will want to play – shakers, percussion, wooden blocks, sounding sticks, bells, scrubs and use them to create a common musical composition. The duration of the active form of music therapy is 1–1.5 hours.

Unwritten principles apply in the facility, for music therapists, but also for pedagogical staff who participate in music therapy:

- Create a quiet, safe space to experience the effects of unreproduced music (considered the most effective here)
- To support and respect the individuality of the student
- Music therapy is performed by a qualified pedagogical worker who has completed the educational program, has theoretical knowledge and his own experience with the effects of holistic music therapy
- Know and follow the ethical principles of music therapy
- He is capable of self-reflection, self-education
- Monitor children's feedback, their verbal and nonverbal expressions
- The worker who is present at the receptive music therapy does not interfere in the course, the child does not stroke, does not speak
- In the active form of music therapy, we respect the manifestations of the child, we do not moderate them, we do not correct them, we do not shout
- Children are involved in imitation
- The process is managed by a music therapist, we all follow his instructions

- All pedagogical staff have the right to comment on the evaluation of the course of music therapy, they know their pupils best, they are able to adequately and objectively evaluate the effects of the lesson.

The pedagogical staff of this school evaluates the regular implementation of music therapy very positively. They noted that music therapy in children:

- Reduces muscle tone in students
- There is total relaxation, inducing pleasant feelings
- Positively influences speech, speech rhythm, children vocalize, add vocally, hum
- Activation of the orofacial area
- Establishing visual contact, prolonging visual perception
- Supports auditory discrimination and spatial orientation
- Supports perception, remember and respect the sequence of individual actions
- Induction of calm, well-being, reduces states of restlessness, hyperactivity, disharmony
- Helps to establish a teacher x student relationship
- Supports mutual communication between students, joint work in a group
- Supports the ability of imitation, mirroring
- Hand rotation promotes interaction between the right and left hemispheres
- Overall improvement of body coordination, fine motor skills, graphomotor skills.

Figure 1 Music therapy in a special primary school in Ostrava



As an inspiring approach to music therapy in a special primary school, we present the following case study:

Boy 17 years, cerebral palsy the spastic form of quadriplegia, other mental retardation, compensated partial epilepsy, hydrocephalus. The boy has been a pupil of this school since he was 5 years and 8 months old, ie since September 2010, when he attended the preparatory stage of primary school. Since September 2012, he has been fulfilling compulsory school attendance. The boy is educated according to the school educational program for special primary school.

Personal anamnesis

The mother was not ill during pregnancy but was on a high-risk pregnancy due to a previous premature birth. All tests during pregnancy were fine, no findings. The boy was born at 24 week, birth weight was 700g and measured 29cm. Childbirth after the spontaneous outflow of amniotic fluid was complicated. After birth, the boy was raised and there was a total contusion of the child. After birth, there was severe bleeding into the brain and subsequent development of post hemorrhagic hydrocephalus, repeatedly resolved by punctures. Due to the immaturity of the lungs, it was incubated immediately after birth, placed in an incubator and taken to the ICU. Brain drainage introduced in three months, repeated revisions, frequent infections. He was probed for a long time. He began rehabilitating at the age of eleven months with Vojta's reflex locomotion method, after which, unfortunately, appeared epileptic paroxysms.

In a boy was diagnosed a severe multiple disability that involves CNS dysfunctions. Cerebral palsy with a more pronounced expression on the right upper limb and left lower limb, manifested by increased muscle tension (hypertension) and impaired coordination of motor processes. Increased tension affects the whole body, especially controlled motor skills, which leads to increased irritability and spasticity. Stereotypical movement patterns predominate. When trying some motor activity, spasms of the upper and lower limbs occur at the same time and thus grip is significantly reduced, the spasms of the limbs also increase by eating and feeding. Due to a significant motor disability, his mental abilities are difficult to assess. His sensory perception, communication skills and overall psychosocial development are greatly limited. This results in a global psychomotor developmental delay approximately corresponding to severe mental disabilities.

Music therapy with this boy takes place at least once a week. On Friday there is an active form of music therapy, during the other days individually receptive form of music therapy in Snoezelen. As part of the group music therapy, the boy is placed on a bag – he is part of a circle of children, percussion, bells, shakers are placed in his hands and he rhythmizes with the others. After inserting the mallet into his hand, he tries to rhythmically tap into the sound stones of the balaphon. Within the Snoezelen environment, he is positioned in a nest on a trampoline so that he has the opportunity to watch what is happening in the room and watch the music therapist play instruments – basket bells, mountain fujara, hum, djembe, Tibetan bowls, Indian flute etc.

The boy is looking forward to music therapy, he shows it with a smile and sounds – he tries to sing, we see cheerful expressions on his face. He engages in spontaneous

percussion, relaxes muscle tone, rhythmizes the lower limbs, tries to „dance“ to move the whole body, torso during fast movements. Everything is accompanied by smiles, sounds, loud laughter and cheers. He notices when changing instruments, followed by a bigger breath and a longer exhalation. He loves the sound of humble, didgerid and shiotanka. He observes other children during collective music therapy. There is a total relaxation of the body, deepening and regularization of the breath, often immersed in sounds and enjoying rhythms with closed eyes. He responds very well to sounds. He turns behind them. He watches the instruments game closely, sometimes he gets involved independently. He accepts body play. The main goal of the therapy is relaxation, inducing pleasurable feelings, improving of the mood, strengthening concentration of attention. **Overall, the boy is after music therapy lessons more receptive and attentive, the time of concentration of attention to the specified activity has increased and visual contact has prolonged.**

Project „Joint Drumming“

Music, rhythm, drumming are among the oldest instruments of communication and joint drumming is the oldest form of teamwork. Rhythm is a universal language that can transcend differences between people – nationality, gender, age, race, health restrictions, communication difficulties, physical and sensory disabilities. It is a non-verbal, primary way of communication, which reveals the stereotypes experienced in the communication of the group. Each person represents one tone, even if that tone is perfect, he will never play the melody himself. Only a joint interplay with others – other tones – will create a beautiful melody, harmony, success.

The project „Joint Drumming“, which took place in the primary school in Bohumín, focused on the specific primary prevention of problematic and risky manifestations of pupils' behavior. It was financed from a non-investment grant from the budget of the Moravian-Silesian Region. The possibility of financing the program brought to the school music therapy, drumming, active playing a musical instrument for each student.

The primary school is located on the outskirts of the town Bohumín, whose pupils are mainly from socio-culturally disadvantaged and different backgrounds, especially the Roma pupils. One third of pupils are diagnosed by mild mental difficulties. These children are easy target of the temptations of the environment: theft, verbal and physical aggression, wandering, abusing of alcohol and drugs, smoking etc.

The project focused primarily on children in the preparatory class and pupils in the 1st grade (approximately 60 pupils), as they are still open to our work during this period. At this age, it is still possible to influence and perhaps change the opinions and attitudes of children, which they bring from the families and are not allowed at schools. In order for this influence of the teacher and the teaching assistant to be more targeted and conscious, we need to get to know the pupils even more. We know them best in moments of controlled activity, which is close to them, in which they can fully manifest

themselves. And at the same time, they themselves feel that they are actually playing. The close activity in this case is playing a musical instrument – drums, percussion and other like. The secondary target group was other pupils of the school (40 pupils), families of pupils and all school staff (20 persons).

Description of project implementation according to activities

- support for children and pupils of the school (eight hours meeting within the class in the period from September to December of the following year, ie 14 months). Number of children and pupils: 60, of which 1/4 were disabled (mild mental disabilities, hearing and speech difficulties);
- support for teachers – a total of 8 meetings: the first meeting took place before the start of activities with children and pupils, teachers were informed about the structure of lessons, about the activities of pupils and their demands on them. The other meetings took place after the lessons with the pupils, when the music therapist and the teachers present at the lesson with the children evaluated the course of the music therapy lesson, pupils' behavior and activities etc. A total of 8 pedagogical staff participated: 5 teachers, 3 teaching assistants;
- support for the material provision of the project and subsequent continuation by purchasing musical instruments in the total value of 52.000 CZK. The school bought djembe, cajon, percussion, shakers, wooden blocks, slotted drums, agoga, kabasy, rain stick, kalimba, etc.

Project goals

- knowledge of pupils – diagnostic goal
- releasing aggression and working with it
- activation of pupils – prolongation of concentration, concentration, interest in activities, support of creativity
- cooperation – playing together according to the rules of who controls the activity, mutual respect for the uniqueness of personalities, spontaneous group creation of a common rhythm
- development of communication skills.

Implementation

Active music therapy classes were held once a month, always on Mondays in one specific class, and pupils and teachers of a specific class attended here according to the schedule. The hour lasted 45 minutes, ie. that it was part of the morning class.

- 1st lesson preparatory level + 1st grade pupils a total of 20 children
- 2nd lesson pupils of the second and fifth year a total of 21 children
- 3rd lesson third and fourth grade students a total of 19 children
- 4th lesson pupils of the fourth and fifth year a total of 11 pupils
- 5th lesson consultation with pedagogical staff.

The room, which is defined for active music therapy, is spacious, there are chairs of three sizes available to ensure a suitable sitting in a circle for all participating students and teachers. The middle of the circle is the offer of percussion instruments. Active music therapy is led by a music therapist.

Structure of music lesson

- Greeting – sending the basket from the outside, reminding the rules, space for relaxation, group tuning
- Active game on jam – warm-up, basic strokes, rhythm creation, joint rhythmization using simple children’s songs
- Music therapy orchestra – spontaneous percussion, collective creation
- Receptive form – listening to samsula, hum, play shiotanka
- Termination – by sending the basket from the outside, the children pass on space for feedback on what he liked, what he did well, how he feels.

During the play, all activities are conducted so that the students relax, begin to realize their place in the environment and the class team, they are not alone in the classroom and learn to work together. Spontaneous play awakens their inner motivation, desire to discover and learn. It develops partnerships and confidence in oneself, in one’s abilities and skills, responsibility for a common work. Each lesson when students meet is unique, original – created according to the immediate needs of pupils. Teachers working in the classes monitor the attendance of students, actively participate in all activities together with the others, observe how students manifest themselves in a lesson and in the time between meetings. They use their knowledge for early diagnosis. The results of this observations are lately discussed during interview with the lecturer – music therapist and teachers.

Evaluating the effectiveness of education is challenging, it is not very possible to quantify manifestations, because the experience is very personal. However, by observing in everyday practice, teachers are able to catch changes in the behavior of pupils.

Criteria:

- outputs from the observation of pedagogical staff working in individual classes – fulfillment of the agreed goal
- calming pupils and improving the class climate, and subsequently school climate
- conclusions from observations of pedagogical staff.

To meet our results, we needed the records of pedagogical staff in the participation and changes in pupils, feedback obtained after the end of each block, observation of pupils' behavior and actions during teaching.

The children were always looking forward to music therapy, they tried to get maximum of our attention, most of them had short-term attention and distraction. Playing drums was very motivating for them. Most of them had a problem with changing hands during the game (connecting the right and left hemispheres), they quickly got tired, it was necessary to monitor their nonverbal feedback, alternate activities and verbally motivate them. At the beginning, it was necessary to set up the rules, pay attention to their observance, the lesson ended with feedback, the students shared their experiences. In the first lesson, all students had difficulty expressing their own opinion and respecting the other's opinion. They were not used to asking them for their opinion, for the message, of what they had experienced. After the first meeting, the hyperactive children were tired and complained of a headache. The rule was again emphasized – to drink continuously during active music therapy. Already at the third meeting, greater concentration, mastery of even more demanding rhythms, respect for the opinion of the other, responsibility for joint creation, quality verbal feedback for the lesson were recorded.

Within this project, the school management wanted to improve the school climate, support the activity and creativity of children, pupils and teachers, give teachers another tool for early diagnostics in the classroom, creating a safe and activating environment and find a way to improve relationships between teachers and pupils. To make children aware of their responsibility for what they do and how they behave, which is a prerequisite for a significant reduction in the aggressive behavior of pupils in school.

As part of the teaching of subjects, teachers recorded in children:

- Longer attention and focus on assigned tasks
- Greater respect for the teacher's instructions and adherence to the rules
- Willingness to communicate with the teacher and classmates, communication calmer without shouting
- Development of verbal expression
- Overall calmer climate in the classroom, higher motivation to work, willingness to work in a group
- Visible calming in hyperactive pupils and with behavioral disorders, induction of a pupil x pedagogue relationship
- Joy of work done, children's interest in praise, awards, feedback.

Afterwards, teachers in this primary school have the necessary material equipment, their own experience and basic instructions of how they can work with children, how to use elements of music therapy in other subjects. As part of art lessons, they made percussion instruments from various materials, painted them, then decorated them and used them to rhythm in music lessons.

Figure 2 Music therapy in the primary school



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REPORT

A PRACTICAL MODEL FOR PRIMARY PREVENTION OF RISKY BEHAVIOUR IN SCHOOLS

Eva Zezulková

In 2021, the team of academic staff of the newly established Institute of Special Education at the FVP SU in Opava is to implement a project of the Ministry of Education and Science – *Practical Model of Primary Prevention of Risky Behaviour in Schools (PRCH-IP-organization_0040/2021)*, which is in line with the long-term concept of the development of scientific and research activities of the Institute. Primary prevention of risky behaviour in schools is an important component of early pedagogical intervention, especially in the context of current trends of inclusive education accompanied by increasing heterogeneity of classroom collectives and increasing demands on pupils' social skills. The priority topics of the scientific and research activities of the Institute of Special Education include: inclusive education with an emphasis on the education of pupils at risk of school failure and pupils with special educational needs, the development of cooperation between the university and practice with a focus on the issue of balancing opportunities for citizens with disabilities in the Moravian-Silesian region, and strengthening the competencies of graduates of special education for the needs of the labour market.

The project concept is based on the needs of school practice to continuously strengthen the development of social skills of pupils. The need to pay increased attention to this topic is made more acute by the consequences of the crisis associated with the COVID-19 pandemic, during which the development of pupils' social competences was put on hold for a considerable period. Pupils who exhibit risk behaviours have serious emotional deficiencies that limit their self-concept and their success in establishing and maintaining appropriate interpersonal relationships. They often face mistrust from classmates and teachers due to uncertainty over how to assess and respond to their risky behaviour. Impaired social skills can significantly disrupt the process of adaptation to the school environment and can also negatively affect educational progress and outcomes. A significant period in the formation of an individual's personality is the period of early school age. Fixed risk behaviours at this age are very difficult to eliminate later on, and the effectiveness of educational approaches often does not correspond to the efforts made by educators.

The project is intended to support the development of professional competences in school counsellors and teachers for intervention work with pupils with problematic and risky behaviour. The aim of the project is to monitor risky behaviour of pupils in the school environment with an emphasis on the analysis of manifestations and causes of risky behaviour, including reflection on effective means of support in dealing with risky behaviours in pupils. The target group consists of primary school teachers and pupils

of younger school age (6–12 years) in inclusive education; attention will also be paid to pupils with special educational needs, which can be a predictor of risky behaviour. In order to develop social skills, the method of working with the target group will be activity-based. In addition to verbal methods (narratives, interviews, discussions about specific stories and situations), activating methods (interactive guided games and didactic games aimed at developing particular social skills in the form of concrete experiences of children, exercises, acting improvisations, common situations of everyday life, etc.) will also be used.

Cooperation with the primary schools supporting the project is long-term and is mainly based on the successfully implemented project *Direct and Clear Support for School Inclusion – the Question of School, Family, Neighbourhood* (2016–2019). The project addressed issues relating to the conditions of inclusive education, with an emphasis on increasing the competences of teaching staff, on cooperation with legal representatives of pupils with special educational needs and pupils at risk of dropping out of education, and direct support for these pupils. Throughout the project, for more than 600 pupils, tutoring was provided directly in the school environment, and, for 55 pupils, individually in the environment of their homes.

The outputs of the implemented project *Practical Model of Primary Prevention of Risky Behaviour in Schools* will be presented in the concrete form of final reports on the results of the monitoring of the manifestations and frequency of risky behaviour of pupils in the school environment, and on the results of the monitoring of the needs of teachers in the field of support in intervention work with pupils with problematic and risky behaviour. The findings will provide the necessary basis for the design of the Interactive Social Skills Development Programme and its pilot testing in school practice. On the basis of the analysis of the pilot validation, measures will be formulated for the implementation of the Interactive Social Skills Development Programme in school curricula, especially in minimum prevention programmes.

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BOOK REVIEW

THE FAMILY'S MEMORY IN US IN THE LIGHT OF NARRATION OF THREE GENERATIONS

Marta Kolaříková

Radmila Švaříčková-Slabáková a Irena Sobotková (2018). *Rodina a její paměť v nás ve světle třígeneračních vyprávění [The family's memory in us in the light of narration of three generations]*. Praha:Triton

Family memory is a very topical issue, with very few experts in the Czech Republic focusing on it. The book is based on an interdisciplinary approach from the perspective of psychology and history. The view of psychology is directed towards understanding the functionality of the family, family relationships, family resilience, while the view of history is important for understanding the socio-historical context.

In the introduction, the authors define the basic theoretical grasp of the concept of „family memory“, which they understand as a process of negotiating and reshaping memories in a way that gives meaning to the family in the contemporary world. The book introduces us to the results of an intriguing research investigation in which three blood-related generations of 13 families were followed; the research sample was matched both in terms of highest educational attainment and the ratio of men to women (17:22). In describing the research method, the authors also pointed out, among other things, the added value of semi-structured interviews, which is the perceived new insight into the families' past. The starting point for the structure of the interviews was Anne Muxel's questionnaire. The authors managed to be sensitive and protect privacy even when dealing with very private topics. In a very extensive systematic content analysis, the authors proceeded in two directions: generation by generation to capture changes over time, and simultaneously generation by generation for each three-generation family to better understand what is specific, typical and unique to them.

The authors divide the book into four main chapters, which were compiled according to the results of the qualitative analysis of the data. Each chapter has a theoretical introduction, followed by the research findings, including the direct accounts of the participants, followed by the answers to the research questions and possible suggestions.

The first chapter, „Family Memory“, includes testimonies of families and individual generations on how they perceive the importance of their own history, to what extent genealogy is an essential part of their family history or a mere curiosity or even a useless thing. That family history is particularly important to the oldest generation, which fulfills Erikson's generativity, is to be expected, but readers may be surprised to learn that the youngest generation is much more interested in it than the middle generation, and in two cases family history is even only of interest to the youngest. Only in one

family were all generations interested in family history. There are many facts that strike the reader as they read through the book. For example, that when the authors talked to the participants about family history, it was mostly related to present life and childhood memories, to narratives and stories, rather than to family ancestry and family trees. The research confirmed the findings of other similarly focused investigations, namely that these are mostly not whole narratives but rather memory fragments. The authors report that across all generations it is relatively easy to recall memories of one's own parents and grandparents, partially of great-grandparents, and rarely of great-great-grandparents, but no more stories and narratives relating to great-great-grandparents appear. In the second half of the chapter, the authors describe how each generation remembers its mother, father, grandmother, and grandfather. In evaluating the results, they reflect on how surprised they were by the stereotypical picture of parents and grandparents that spoke across generations of gendered roles rather than personality traits.

Family stories thus form the basis of family memory. In the narratives of the oldest generations, the authors identified several features in family history that relate to the family atmosphere as well as to the values and traditions passed on. Functions described were the entertainment function associated with the creation of a good mood, the function of instruction, the transmission of values, or the function of satisfaction from the continuity of the family. The survey results only confirm that „sharing memories in well-functioning families is perceived by all generations as important and bonding in principle.“ However, the authors very aptly describe the importance of storytelling for family communication and strengthening family resilience. Telling unpleasant memories can often lead to making amends, explaining misunderstandings, and reconciling. The authors present the cases of four families who were much marked by wrongs, painful experiences, families who at first glance recalled less, families who outwardly appear to prefer not to recall. However, if they can draw on the inner strength of the family and do not generalize the hurtful memories, they look for the positive from them, thus using the selectivity of memories as a necessary feature for processing and incorporation, which at the same time strengthens family resilience. However, as the authors themselves conclude, „the art is to distinguish what is essential and should be clarified, and what can be left alone.“

The second chapter, „Memories and Childhood,“ was related to the goal of describing childhood memories in a multigenerational context, as attention to this line of research has not been given in the literature.

The authors sought to explore the psychological, emotional, relational and value aspects of memories in a multigenerational context. The description of how the participants remember their childhood and what they would wish for the next generations was already presented by the authors in their previous book „Even a family has a memory“ (2018). Now they have decided to explore what the research participants would not wish for the next generation to experience from their childhood. Two main categories were analysed as part of the analysis of the findings. The first one includes personal and family circumstances, the most frequently mentioned being bad relationships, break-ups, death, health

problems; the second one consists of unfavourable memories linked to socio-historical contexts. It was confirmed by the testimonies of the youngest generation, who could not name the social consequences they would not wish for their children in the future, that external circumstances and their influence on family history cannot be omitted, but at the same time we can live in a time when the influence of these circumstances is not significant. The authors are very positive about this trend, so if we do more to foster good relationships in families, families will be functional and the conditions for children's development will be optimal. However, the fact remains that the atmosphere in the family is more important than external influences.

An interesting part of the evaluated semi-structured interviews were also questions about memories and meanings. The most frequent recollection was in relation to tastes and smells, both in a positive and negative sense (Probably many of us can recall the smells of some of the school canteen meals that turned us on before we reached the serving window). The second most frequently described sense was hearing, which, unlike tastes and smells, was tied more to public spaces. However, these recollections tended to belong to the middle and oldest generation, and were often tied to sounds from war or other socio-historical events. According to the authors, sensory memories are very often linked to a person's emotional state.

Attention is also paid to the attachment to the place of the memory; in this investigation, too, time is confirmed to be an unreliable variable for memories. For example, the relationship to fathers' and mothers' families was also examined, which is most likely to be formed by subjectively perceived emotional closeness. Quotes from the participants explaining their family behaviour are very aptly chosen in the book; the authors were looking for similar patterns of behaviour.

The third chapter is devoted to intergenerational transmission. The authors of the research were interested in whether families continue to come together in the next generations, whether any customs and traditions are passed on in families, whether photographs or memorabilia are kept. And the connection was proven. An interesting finding was, for example, that the way intergenerational learning changes over time. The current generation is not satisfied with the formerly accustomed model of „watch now and you will learn“, but prefers non-violent learning, mutual communication, sharing, a sense of voluntariness. Therefore, the authors recommend that the younger generation should be taught by the older transmitting generation to take advantage of shared moments and situations in which they pass on experiences in a non-coercive way. The advantage of the current era is the strengthening of the role of grandparents, who are living to a higher age than they used to and have many more opportunities to pass on to the younger generation. Understandably, this transmission is reciprocal; children can help their grandparents navigate today's fast-paced era full of technical innovations. The fourth chapter relates the message of the family. The authors focused on what the participants considered most important in their life history, what they would like to pass on to the next generation of their families. It was clearly confirmed that the legacy refers especially to the emphasis placed on the functionality of the family, which must

create a safe environment for its members.

Family history connects the generations, ensuring family continuity and family integrity. Certainly the book under review has provided many suggestions for further psychological research as well as many purely human, personal issues. It prompts the reader to take many notes and stimulates a desire to navigate, record, locate, process and preserve as much information about one's own family as possible before it is lost. I haven't read a book as thought-provoking as this one in a long time.

(author's translation)

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