



# **Journal of Exceptional People**

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**Institute of Special Education Studies**  
Faculty of Education – Palacký University Olomouc

## **Journal of Exceptional People**

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# Introduction

Dear readers,

we would like you to become regular supporters of our magazine *Journal of Exceptional People*, which is focused on everything interesting that is happening in the area of special pedagogy, therapy and education of people who require above-standard attention and care. Therefore we are striving for some innovations that would help to raise the prestige of our magazine and which would also contribute to increasing reputation of our work. First of all, our editorial board decided to revitalize the meaningful and useful cooperation with our external staff who are members of the Scientifics Board of our journal. We also decided to address a number of special education institutions and ask their best experts, teachers, therapists, psychologists and other wide range of helping professionals for contributions that would reflect their experience in the above-mentioned area of special education in a broader sense. Our journal would like to publish their experience, observations, scientific papers, overview essays and book reviews of interesting books that are related to the areas we monitor.

In this spring issue, we have prepared a number of interesting articles for you, which are again focused on various areas covering topics on special pedagogy.

The first paper deals with partnerships, intimacy and sexuality in persons with intellectual disability. The authors of this paper are Z. Kozáková and T. Procházková from Palacký University in Olomouc in the Czech Republic. The next article will take us to the UK. In it, the author A. Smith builds on his contribution from the previous issue and reports in detail on the English primary school Special Educational Needs Coordinator (SENCO). Its focus is on the role of the SENCO at work and the varied cultural and political influences in England. The following contribution by Czech authors O. Müller and P. Svoboda summarizes research on the importance of poetry

in educational work with children with specific learning disabilities and in detoxification facilities for respondents of the detoxification unit.

Another Czech author, music therapist J. Kantor, and his colleagues from Czech (N. Častulíková, L. Kantorová) and Norway (T. Anderson, E.B. Olsen, E. Skogdal) and USA (H. Kupferstein) present the concept of far-reaching research which concerns music experience and its effect on augmentative and alternative communication in people with developmental disability. M. Vrabel, K. Pančocha and N. Dostálová report in the following article entitled *Improving functional vision through training based on the principles of behavioral analysis* on methods of developing and stimulating visual perception and focus in detail on the so-called ABC model, visual training, teaching, accommodation, convergence, fusion and vision.

The topic of the following article by the Slovak author K. Tománková is related to the previous article. It focuses on persons with visual and hearing impairments and describes the pitfalls and risks of falls in relation to visual and hearing impairments. The aim of her contribution is to summarize studies that show experience with problem of falls among individuals with sensory loss. Last article was sent to our editorial office by K. Majzlanová from the Slovak Republic. In her article called *Artistic expression and therapeutic aspects of therapy* she pays attention to the issues of experiences in the application of expressive therapies for children with special educational needs.

Our spring issue of the Journal of Exceptional People ends with a review of an interesting book *Discovering the self through drama and movement: the Sesame approach* by J. Pearson. The review was prepared by J. Vávra.

The final part of the magazine contains basic information for potential contributors to our JEP. We wish all our readers a nice spring and a lot of vitality.

Pavel Svoboda, executive editor, JEP

# Sexuality in persons with intellectual disability and its concept in homes for people with disabilities

(scientific paper)

Zdeňka Kozáková, Tereza Procházková

**Abstract:** Partnerships, intimacy and sexuality are an integral part of everybody's life. The same applies to persons with any type of impairment. For them, fulfilment in the area of partnerships, intimacy and sexuality is a significant factor and indicator of one's value, quality of life and life satisfaction. The paper focuses on sexuality in persons with intellectual disability who live in social care establishments. In these types of establishments, these individuals are often part of a community governed by internal rules and standards. As a result, these establishments can create a specific environment in order to fulfil relational and sexual needs of their clients. The research involved individuals with intellectual disability and employees of homes for people with disabilities (HPDs). The main objective of the research is to find out how sexuality and its manifestations are perceived by the employees and clients of selected homes for people with disabilities. One of the partial objectives was to find out whether HPDs perform sexuality education, whether they use any professional resources and whether they provide continuing education and development in the area of sexuality both for employees and clients. The authors also analysed the knowledge and experience of clients in the area of sexuality, their perspectives of parenthood, privacy, sexuality education as well as partnerships and their establishment. Another aim was to investigate how the perception of sexuality had developed throughout the existence of the establishments. This information was acquired by means of semi-structured interviews and their subsequent analysis. The administration of the interviews was both personal and electronic in three homes for people with disabilities. The research, the results of which are presented in the text below, has brought new information about how specific homes address their clients' sexuality, which resources they use and what experience and knowledge their clients have in the area of sexuality. It turned out that it would be desirable to perform a similar research study across the whole network of homes for people with disabilities in order to find out information that would help resolve further questions concerning partnerships,

*intimacy, sexuality as well as sexuality education of persons with intellectual disability in social care establishments.*

**Keywords:** *Sexuality, persons with intellectual disability, home for people with disabilities, partnership, parenthood*

## 1 Introduction

Sexuality is undoubtedly one of the basic human needs. The same applies to persons with intellectual disability. The area of sexuality includes many sub-components. As suggested by Venglářová (2013, p. 18), these include the need for intimate contact with a close person, strong emotions, sense of belonging, sense of being needed by others, sexual intercourse, sexual satisfaction as well as parenthood. In her publication, Binarová (2000) claims that sexuality is not just sex, masturbation and orgasm but it also “expresses the diversity of attitudes, values, relationships, activities between a man and a woman. It also includes the differences between a man and a woman, both in physical appearance and behaviour.” Already in 1993, Hartl suggested the following: “Sexuality is usually defined as the sum of human behaviours and feelings arising from the physical and mental differences between genders, including anatomical, hormonal and reproductive differences as well as the different roles acquired through learning, physiological satisfaction and psychological pleasure associated with sexual activities, bonding, excitement, connection” (Hartl in Mandžáková, 2013, p. 20). The function of sexuality is no longer merely reproductive; it also brings delightful experiences, pleasure and relaxation. Despite its importance, this human need is often considered a taboo even today.

As suggested by Mandžáková (2013, p. 25), the way in which sexuality is understood and approached may differ between individuals. Everything should always be assessed individually and every person must be considered unique and exceptional. This is even more important in the case of persons with intellectual disability, where the severity of impairment plays an important role in their perception and sexuality. In any case, it is necessary to start with the needs of every individual (including sexual needs) and respect their possibilities, abilities and desires.

Currently, the overall perspective of partnerships and sexuality in persons with intellectual disability (ID) has changed in many respects. The system of supporting persons with ID has significantly changed over the past two decades. In the past, persons with ID used to be in large institutions, which had nothing in common with the family environment, and where men and women were often separated (Kozáková, 2004). The consequences of not addressing the issue of sexuality in clients were obvious especially in the institutional conditions of these large collective establishments. The large number of related risks were mentioned by a number of professionals from



the Czech Republic (Kozáková, 2004; Štěrbová, 2007; Bazalová, 2008 and others) and Slovakia (Mandzáková, Hornák, 2011; Mandzáková, 2013, and others). Addressing sexuality of persons with intellectual disability in social services has changed in many respects. Many establishments have included in their portfolio of services sexuality education and approaches that respect their clients' sexuality expressions and needs. In this context, employees in social care establishments should not only be supportive but also guide their clients in this area of their life. They should be able to communicate with their clients effectively, support their rights and responsibilities and in the context of sexuality reflect their sexual and relational needs. An important ability is loyalty and protection of clients' privacy, which is an important aspect in the context of their sexuality. Every employee should be well aware of their roles, boundaries of the relationship with their clients as well as their abilities and skills in providing support and care to their clients (Eisner, 2013). A significant area is sexuality education, not only in terms of educating employees of social care establishments and making teams of employees who address sexuality but also in terms of educating their clients. It is important to realize that a full life also includes the fulfilment of relational and sexual needs. Concealing or misrepresenting the necessary information about sexuality is irresponsible and short-sighted, to say the least. According to Eisner (2013), sexuality education has a place in every social service that considers individuals with disability as equals and strives to improve their quality of life.

The system of supporting partnerships and sexuality in persons with ID was significantly increased by the trend of deinstitutionalization of large residential establishments and the process of transformation. The departure from collective care was closely associated with quality of life with an emphasis on values such as dignity, self-determination of an individual and focus on areas such as social relations, partnerships and sexuality. Adequate support provided to persons with ID is one of the dominant elements in the process of becoming independent and adopting the role of an adult person, including partnerships and sexuality roles (Kozáková, 2015).

## 1.1 Aims

The research investigates sexuality in persons with intellectual disability who live in homes for people with disabilities from the perspective of not only these persons but also social workers and direct care employees who are in everyday contact with these clients and significantly contribute to their all-round development.

The main objective of the research is to find out how sexuality and its manifestations are perceived by the employees and clients of selected homes for people with disabilities. One of the partial objectives was to find out whether HPDs perform sexuality education, whether they use any professional resources and whether they provide continuing education and development in the area of sexuality both for

employees and clients. The authors also analysed the knowledge and experience of clients in the area of sexuality, their perspectives of parenthood, privacy, sexuality education as well as partnerships and their establishment. Another aim was to investigate how the perception of sexuality had developed throughout the existence of the establishments.

## 1.2 Sample and Methods

The research study was performed in three homes for people with disabilities (HPD) in the Central Bohemian Region. These homes are intended for adults with intellectual, physical or multiple disabilities, autism spectrum disorders as well as persons with health problems after cerebral stroke and persons with multiple sclerosis who require a higher level of assistance. With one exception, these are large capacity establishments. All establishments are coeducational which means that they have both women and men. The mission of the establishments is particularly to develop decent living conditions, provide support and assistance in coping with daily activities, provide the clients with the most comfortable environment and a happy life while maintaining their uniqueness and maximising their independence in all areas of life. Another aim is to maintain contacts and relationships within and outside the home.

The respondents were clients and social workers. The client inclusion criteria were as follows: clients with a predominant intellectual disability who use the services of homes for people with disabilities or sheltered housing (SH). Their age or severity of impairment were not relevant. However, it was beneficial if the clients communicated by usual means. The social worker inclusion criteria were as follows: employed in one of the selected social care establishments and contact with the client respondents in order to reflect on their experience with these clients. The following clients were not included in the research: clients who did not use the services of HPDs or SH, persons without ID or persons whose primary impairment was not in the specified category. The following employees were not included in the research: employees who do not provide the specified services in HPDs or SH.

The workers included in the research (all of them were female) were recommended by the director or social worker. In all homes, a semi-structured interview was held with the leading social worker and with two direct care workers. In total, interviews were conducted with nine employees from three different establishments. The clients included in the research were recommended by the leading social worker, especially on the basis of their communication abilities, willingness to cooperate, type of impairment and last but not least on the basis of their or their guardian's consent to an interview on sexuality. In total, the research included nine clients from three establishments. The semi-structured interview was held with five female clients and four male clients aged 26–72 years. The client respondents were diagnosed with mild to

moderate intellectual disability, in some clients combined with autism or a psychiatric diagnosis. Detailed information about the respondents is shown in Tables 1 and 2.

**Table 1:** *Overview of respondents (clients)*

	Gender	Age	Type of disability	Length of stay
Respondent 1A	Female	48 years	Mild ID + psychiatric diagnosis	33 years
Respondent 1B	Female	71 years	Mild ID + psychiatric diagnosis	5 years
Respondent 1C	Male	63 years	Mild ID	14 years
Respondent 1D	Female	72 years	Mild ID + physical disability	5 years
Respondent 2A	Male	26 years	Moderate ID + autism	10 years
Respondent 2B	Male	26 years	Moderate ID + autism	1 year
Respondent 3A	Female	60 years	Mild ID	1 year
Respondent 3B	Male	Over 50 years	Moderate ID	5 years
Respondent 3C	Female	54 years	Mild ID	Does not know

**Table 2:** *Overview of respondents (employees)*

	Gender	Age	Education	Length of experience in the field
Respondent 1A <sub>1</sub>	Female	62 years	Bachelor's degree in special education	16 years
Respondent 1B <sub>1</sub>	Female	60 years	Secondary agricultural technical school with school leaving qualification	25 years
Respondent 1C <sub>1</sub>	Female	44 years	Secondary education, grammar school	10 years
Respondent 2A <sub>1</sub>	Female	37 years	Bachelor's degree in social work	7 years
Respondent 2B <sub>1</sub>	Female	31 years	Elementary education, social service worker course	5 years
Respondent 2C <sub>1</sub>	Female	21 years	Secondary school (university student in Liberec)	Student/3 years
Respondent 3A <sub>1</sub>	Female	44 years	University degree in social work and media studies	8 years
Respondent 3B <sub>1</sub>	Female	58 years	University degree	12 years
Respondent 3C <sub>1</sub>	Female	45 years	Bachelor's degree in adult education	25 years

In the research study, qualitative research methods were applied. “A *qualitative approach is a process of examining phenomena and problems in an authentic environment in order to obtain a comprehensive picture of these phenomena based on in-depth data and a specific relationship between the researcher and the participant. In a qualitative research study, the intention of a researcher is, using a number of procedures and methods, to reveal and represent how people understand, perceive, and create social reality*” (Švaříček, 2014, p. 17). In his publication, Hendl (2016, p. 48) presents the

advantages and disadvantages of a qualitative research. According to the author, the advantages include for example obtaining a detailed view and insight during an analysis of a respondent, analysing a phenomenon/individual in a natural environment or responding to local situations or conditions. The disadvantages include the following: the knowledge acquired may not be applicable to the general population or to a different environment, difficult data collection and analysis, the results are often influenced by the researcher and the researcher's personal preferences.

The main data collection method was an in-depth semi-structured interview. Švaříček (2014, p. 159) defines this method as “*non-standardized questioning of one research participant usually by one researcher using a few open questions.*” According to Miovský (2016, p. 159), this is one of the most common methods used in qualitative research. Especially because it can resolve the disadvantages of a non-structured and a fully structured interview, although this method requires thorough technical preparation—development of a scheme that specifies the sets of questions that the participants will be asked. “*It is usually possible to change the order in which the sets of questions are asked in order to maximize response relevance of the interview*” (Miovský, 2016, p. 159).

The interviews were voice recorded and subsequently transcribed into a written form using verbatim transcription (Mayring in Hendl, 2016, p. 212). Then the interviews were analysed to obtain authentic responses to the questions.

## 2 Results

### **Approach of the establishments to expressions of sexuality**

The interviews conducted in HPD1 suggest that this particular home for people with disabilities approaches their clients' expressions of sexuality in an open way and allow individuals with intellectual disability to satisfy their needs in a natural way.

In HPD2, sexuality is not a taboo and clients' expressions are tolerated but in terms of sexuality education, the establishment is only beginning.

Based on the information collected, HPD3 is the most experienced in acceptance and support of natural sexual needs of their clients.

### **Employees' approach to expressions of sexuality and sexuality perception in the establishment: past/present**

The research involved three establishments. In each of them, a total of three employees who work with clients with intellectual disability on a daily basis were interviewed.

In HPD1, all workers had a positive and understanding approach to expressions of sexuality of their clients. However, two of them had a negative opinion about

their clients conceiving a child. The reason is the clients' inability to cope with the complexity of life with a child. One of them admitted her original problematic approach to expressions of homosexual partnerships. However, now she respects these manifestations.

Similarly, in the second establishment (HPD2), the respondents consider sexuality to be an important part of life. Two of them fully respect sexuality and allow their clients to fulfil their needs in privacy and support their relationships. The third employee had to learn to work with this area and perceive the clients' needs as natural. Currently, she is able to talk to clients about this without any concerns.

The respondents in HPD3 perceive sexuality as an open and debated area. Their positive approach is supported primarily by providing new information and training of all employees. All employees support the right of their clients to partnerships or sexual relationships. One of the employees admitted that she had to completely change her approach to the clients' expressions of sexuality and learn to perceive them as a normal part of life.

All nine employees agreed that this used to be a taboo in the past which was addressed by employees' intuition and to the best of their knowledge. Currently, there are many resources, seminars, trainings and specialized organizations that focus on the sexuality of persons with intellectual disability. As a result, social care establishments have the opportunity to educate their employees in this area. This has a major impact on their approach. In this context, clients are provided with professional care in this intimate part of life.

### **Sexuality protocol, quality standards**

In the research study, the employees were asked whether sexuality was defined in the documents used in their establishment. Specifically, whether they had the Sexuality Protocol or whether this area was covered by the Quality Standards.

HPD1 has the Sexuality Protocol. It was developed in cooperation with a methodologist who visited the establishment as part of an educational seminar. The employees were also involved in the creation of the document. The content of the Protocol is reflected in individual work with the clients and their individual plans.

Unfortunately, in HPD2 no sexuality protocol is in place. The employees of the establishment are aware of its absence and are planning its development following a methodological training that they will take. For the time being, sexuality in this establishment is covered by individual client plans.

In HPD3, the Sexuality Protocol is included as an annex to the Methodological Sheets. The Protocol was developed by the employees of the home according to their knowledge gained in seminars and in compliance with the needs of their clients. The Protocol is combined with individual client plans.

### **Materials used for client education**

The research also focused on ways of supporting clients' education by means of available professional resources.

HPD1 has resources for client education but does not use them because its clients did not show understanding or interest.

HPD2 does not have any professional resources for clients focused on sexual behaviour. According to one of the interviewees, so far it has not been necessary to search for such resources. Instead, they use pictures from available literature (Encyclopaedia of the Human Body).

Similarly, HPD3 uses available magazines as sources of information and pictures. They do not have specific aids intended for working with their clients. However, they have videos filmed for the purposes of sexuality education. These videos are freely accessible to the clients. They also cooperate with professionals who present sexuality to the clients in a comprehensible way.

### **Sexuality education of clients**

Educational activity in the three establishments is rather sporadic and consists of specific "lectures" on sexuality. Sexuality is analysed in the event of a situation that requires it. Everything is always adapted to the age and mental level of a specific client. Regular education in the establishments relates to everyday life, including for example distinguishing between genders, body parts and their functions, family ties and relationships. Themes such as family, parenthood, marriage, sexual intercourse or erotic toys are developed only when the clients are interested.

Whenever a pair is formed in these establishments, the employees do everything to ensure that the relationship is healthy and desired by both partners. The clients are allowed to meet and are supported in their relationships and whenever they require advice or professional assistance. The employees in all three establishments agree that if there is no need to talk about these themes, they do not bring them up for preventive reasons. Especially because their clients are affected by intellectual disability and would probably not associate the theme with a particular situation. However, when needed, they make an individual client plan and follow the plan in order to help the client overcome the situation.

### **Sexuality education: clients' knowledge**

In this part of the research the questions focused on the clients' knowledge in the area of sexuality and relationships. The questions related to distinguishing between genders, sexual organs, knowledge of the terms such as make love, sexual intercourse, sex. Another set of questions related to partnerships, parenthood and child care. Taking into account the clients' intellectual disability, the questions on sexually transmitted diseases and contraception were given to only some of them.

According to the results, the clients in HPD1 (three women, one man) are able to distinguish between a woman and a man and are able to name their sexual organs, although they use colloquial language. The term sexual intercourse/sex is familiar to the man and one woman. Two women know how children come to the world, the man has an idea, while one woman does not know. Two women do not know how to care for a child, while the man and one woman have little knowledge of child care. The terms sexually transmitted diseases and contraception were unfamiliar.

The research in HPD2 included two respondents (males). Both are able to distinguish between a man and a woman and are able to identify the sexual organs. They are unfamiliar with the terms sexual intercourse and sex. One of the clients knows that a woman gives birth to a child and has an idea of the basic principles of child care. Regarding the severity of the intellectual disability of the other respondent, no answers to these questions were obtained.

In HPD3, three clients (two women, one man) were interviewed. All of them know the differences between a woman and a man and are able to identify the sexual organs. They are also familiar with the term sexual intercourse. One of the women knows how children come to the world. Both of them know the basic principles of child care. None of the clients knows any sexually transmitted diseases or contraception methods.

The knowledge of the clients in the three homes for people with disability in the area of sexuality correspond with their impairment and are highly individual. If the clients are interested, these terms are explained to them.

### **Establishing partnerships between clients and their sexual experience**

In all three establishments involved in the research, the clients are allowed to meet both inside and outside the home. HPD1,2,3 organize social and sports events where the clients meet one another and also people from outside the homes.

Of the nine respondents, one man and one woman have a partner at the moment. Three of the respondents had a partner or a very close person in the past. Four of the respondents have not had a partner.

All of the respondents have some sexual experience. Six of them have experienced sexual intercourse with another person. One man had an unpleasant experience with a person of the same sex. One woman used a sex toy to achieve satisfaction. Most of the respondents resort to self-satisfaction.

### **Clients' privacy**

The questions concerning this topic were given to the clients and the employees in all three establishments. Only in HPD2 there is no need to address clients' privacy because they live in single rooms. This was confirmed by the clients.

In HPD2 privacy in twin or triple rooms is ensured by means of dividers or mobile screens. According to the clients, this method of ensuring privacy is sufficient and accepted.

HPD3 ensures client privacy in the same way.

### **Experience with clients' expressions of sexuality**

The experience with the clients' expressions of sexuality differ among the employees.

In their jobs, they have had to address various intimate matters of their clients. These included, for example, purchasing a sex toy or contraception. They also helped create a healthy relationship between two clients who started living together. The experience of the employees also relates to homosexual relationships or a transgender individual. They also had to resolve clients' self-satisfaction in common areas by referring them to their private rooms. There are also partnerships in their home for which they try to ensure privacy.

### **Problematic factors of sexuality education in HPDs**

A problematic factor suggested by HPD employees relates to homosexual relationships and transgender individuals. The homes need to address the issue of sexual assistance.

Another problematic factor suggested by the employees is the cooperation with some guardians who are not open to this area and refuse to acknowledge that individuals with intellectual disability have these needs.

### **Employee training**

The interview with the employees suggested regular training in all three establishments including new information in the area of sexuality. They attend seminars and trainings that take place directly in the homes or outside. All of the employees believe that recently the interest in sexuality has increased which helps better understanding of persons with intellectual disability and their needs in this area. At the beginning, the homes had to accept this area themselves and then work on it to the best of their knowledge for the benefit of the individual. Currently, in cooperation with professionals, they provide high-quality care and follow sexuality standards and protocols in the interest of their clients.

Tables 3 and 4 summarize the responses to the questions that were significant for the research.



**Table 3: Overview of respondents' (clients') answers**

	Sufficient privacy in HPD	Sexual experience	Sexuality education		Partnerships		Parenthood	
			Can identify the differences between a woman and a man Knows the sexual organs	Knows what sexual inter-course/sex is	Is unable to establish a new relationship	Has/does not have a partner	Knows/does not know how children come to the world	Knows/does not know how to care for a child
Respondent 1A	Yes, a room for three	Yes, with an erotic toy	Yes	No	Yes	No	"Is born"	Does not know, would "place the child in an infant home"
Respondent 1B	No, but does not need it	Yes, in the past	Yes	Yes, "they make love and make children"	Yes, but does not want it	Yes, in the past	"From a women"	Has an idea "bath, food, clothes"
Respondent 1C	Yes	Yes, with a woman	Yes	Yes	Yes	Yes, has a "wife"	Has an idea	Yes, "change nappies, feed..."
Respondent 1D	Yes, a room for two	Yes, "they did something" with a man	Yes	No	Yes	No	No	No
Respondent 2A	Yes, an own room	Yes, masturbation Unpleasant touch from another man	Yes	No	Yes	No	"From a seed"	Yes
Respondent 2B	Yes, an own room	Yes, masturbation	Yes	No	Yes	No	-	-
Respondent 3A	Yes, a room for two	Yes	Yes	Yes	Yes	Yes, had a husband in the past	Yes	Yes
Respondent 3B	Yes, a room for two	Yes, with a woman	Yes	"Two people make love"	Yes	Had a close female friend in the past	No	No
Respondent 3C	Yes	Yes, with a man	Yes	Yes	Yes	Has a partner	No	"I feed the child"

**Table 4: Overview of respondents' (employees') answers**

	Approach to expressions of sexuality	Sexuality education of clients	Sexuality education	Development in sexuality education
Respondent 1A <sub>1</sub>	Open, respectful, responsive Absolutely negative opinion about parenthood	Education if required by a specific situation	Yes, every year selected employees are trained	Previously, they worked intuitively, now they use the knowledge gained in trainings and courses
Respondent 1B <sub>1</sub>	Open and respectful to expressions of homosexuality	Not on a regular basis	Yes, recently they saw an educational film	Yes, it is different, I see it as a trend; in the past, this was a big taboo
Respondent 1C <sub>1</sub>	Responsive, open Negative about parenthood	Addresses any problems that occur	No specific training on sexuality, only as part of a different training	This area is no longer neglected as in the past; at the same time, there are brochures available that help us explain things
Respondent 2A <sub>1</sub>	Neutral	Does not happen, regarding the severity of the impairment there has been no need to discuss this for the purposes of prevention	Yes, a training is currently planned to help resolve any problems in the area of sexuality	Positively assesses the possibility of continuing education in the area of sexuality and relationships
Respondent 2B <sub>1</sub>	Neutral, tries not to notice any expressions of sexuality unless someone else is bothered	Does not take place	As part of a social service worker course	Previously was afraid to talk about this issue, currently has no problems
Respondent 2C <sub>1</sub>	Considers it to be a natural part of the life of all people	If necessary, then yes	Yes, during university study	Has no previous experience
Respondent 3A <sub>1</sub>	Open, respectful and supportive	Yes, as part of individual planning	Yes	During the past year, this area has improved in the context of social care; previously this had been a taboo.
Respondent 3B <sub>1</sub>	Respectful, supportive	Yes, with clients who need it	Yes, trainings and courses	Over the past years, this area has been open and is no longer a taboo; it is good that these things are spoken about
Respondent 3C <sub>1</sub>	Open, supportive, respectful	Yes, we have the Sexuality Protocol and methodological guidelines	Yes, on a continuous basis; sexuality training once a year	Thanks to the trainings our employees are educated; in the past, sexuality was addressed intuitively and was rather neglected; currently we have methodologies and guidelines that allow us to work in the interest of our clients

### 3 Discussion

Sexuality is part of a quality life, including individuals with intellectual disability who live in social care establishments. Although sexuality and partnerships are no longer a taboo, in many social care establishments this area is not addressed in a systematic way.

This area was investigated by a research study carried out in 2004 in the Czech Republic (J. Spilková, J. Mellan), according to which institutional care failed to provide sufficient information about sexuality and sexuality education. 75% of respondents (employees in social care institutions) reported that they had not taken any training in addressing sexuality of persons with intellectual disability. 40–60% of employees suggested that they did not address the sexuality of social care clients at all (Eisner, 2013, p. 120). A well-educated and trained employee should be able to address clients and their expressions of sexuality in order to maximize their satisfaction and self-sufficiency. A key factor in satisfying sexuality is sufficient privacy, which some larger social care institutions may not be able to provide. The research did not directly confirm this fact but it should be taken into account. In her publication aimed at persons with disability and their sexuality, Venglářová (2013) suggested that insufficient privacy might cause a number of problems including, for example, psychological issues, aggression, deprivation or asexuality, which can lead to discomfort and subsequent manifestations of pathological phenomena.

In all cases, it is always necessary to act individually according to the possibilities, desires and needs of each client.

The results of the present research suggest that the area of sexuality is currently discussed much more than in the past. Despite this fact, this is not an area that would be fully integrated in the system of social services, specifically in homes for people with disabilities, whose employees and clients were included in the research. One of the main recommendations is further work in this area. Employees should be open to new knowledge, support employee training in this area and educate clients in the area of sexuality.

Other recommendations relate to various resources that employees could use. They should not be afraid to show things as they really are. They should use self-explanatory books and videos and try not to separate clients from this area but instead provide support and guidance.

The last recommendation is aimed directly at clients and their close persons. Employees should work with the family and teach them to accept the fact that their “child” also has these needs which should be satisfied and spoken about. Accepting this fact by the family will allow the client perceive these needs at a different level instead of hiding them. The client will also learn to satisfy these needs, which could in many cases release tension and discomfort and lead to the satisfaction of their needs.

## Ethical aspects and limitations of the study

All persons involved in the study gave their consent to participation. Prior to the commencement of the research, each participant signed an informed consent form and approved their participation and processing of precisely defined information. Regarding the nature of the research, a total of three informed consent forms were made—for employees, clients and guardians. All informed consent forms are kept by the authors of the paper and are available for reference. All research participants had the right to withdraw from the research and terminate their participation at any time. The privacy and personal data of all participants were protected. For this reason, the names of the establishments where the research was carried out and the names of the participants are not specified. Each institution and each participant were identified using a specific code. This procedure was also selected with respect to the theme of the research, which is purely intimate and private. The authors took adequate measures to prevent the data from being matched with a specific person. All recordings and notes were made only for research purposes.

The research study including data acquisition and processing are affected by limitations that could have affected the data including their processing and interpretation.

The first group of factors that can be perceived as problematic or influential are limitations on the part of the researcher. These include personal aspects that have an effect on the quality of the research: motivation, interest and knowledge of the subject. The research may also have been influenced by the current mood of the researcher. Other significant factors include age, gender, experience and status of the researcher. The researcher came to the establishment as a completely new and strange person and it was not entirely clear whether the clients would be willing to cooperate and confide their experience concerning sexuality. For this reason, the interviews also included the employees who provided specific information about the clients.

There are also some limitations on the part of the respondents. The research including the data obtained from the clients and employees may have been distorted by the current mood and internal influences such as fatigue or hunger and external influences including a noisy and distracting outdoor environment or online communication required by the situation in the country (COVID-19). All of this certainly had a big effect on the respondents. Another significant aspect concerns the specific character traits of the clients and nature of their impairment (intellectual disability, autistic spectrum disorder and other related disorders). Another limiting factor on the part of the clients was that they spoke to an unfamiliar person. A friendly contact, introduction and communication on other topics could have brought more subjective and natural answers.

The research was also affected by methodological limitations. The data were collected by a semi-structured interview. This type of interview does not have a pre-

defined structure and uses themes that can be affected or changed by the researcher or the respondent during the interview.

## 4 Conclusion

The research study clearly indicates a shift and progress in the perception of sexuality within social services, namely homes for people with disabilities that provide care to individuals with intellectual disability. The main objective of the research was to find out how sexuality and its manifestations were perceived by the employees and clients of selected homes for people with disabilities. According to the results, their approach has changed compared with previous years and they are now more open and respectful. However, sexuality education does not take place in all establishments. This is an important finding considering the fact that sexuality education is a means of preventing social-pathological phenomena among persons with intellectual disability. It would be desirable to carry out similar research studies in other homes for people with disabilities in order to map the current situation. These studies should focus on how employees approach their clients in the area of sexuality, to what extent they use available resources and whether their establishment supports sexuality education. The results of these follow-up studies could serve as a basis for the development of other resources, methodologies and guidelines that would help employees in their work with persons with intellectual disability.

An extremely important part is cooperation with parents or guardians of persons with intellectual disability and their education in the area of sexuality. Their open and understanding approach to expressions of sexuality may also support an all-round development of their child or ward. Regarding the above, it would be desirable to carry out a research study aimed at the attitudes and experiences among parents/guardians of persons with intellectual disability and related needs. This could support professionals in bringing together the establishment, parents and clients in the context of sexuality education.

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## References

- [1] Bazalová, B. (2008). Sexualita a sexuální výchova u osob s mentálním postižením v institucionálních podmínkách, *Speciální pedagogika*. Vol. 18, No. 3, pp. 247–255.
- [2] Binarová, I. (2000). *Partnerství, sexualita a rodina*. Olomouc: Vydavatelství Univerzity Palackého.

- [3] Hendl, J. (2016). *Kvalitativní výzkum*. Praha: Portál.
- [4] Kozáková, Z. (2004). Sexualita a sexuální výchova osob s mentálním postižením v podmínkách zařízení sociální péče. In *Sexualita mentálně postižených: sborník materiálů z celostátní konference*. Praha: Centrum denních služeb, pp. 17–28.
- [5] Kozáková, Z. (2015). Experiences and attitudes of young people and older people in relation to people with intellectual disabilities. In *International Scientific Conference. SOCIETY, INTEGRATION, EDUCATION*. Latvia, May 22–23. Vol. III, pp. 126–134.
- [6] Mandzáková, S., & Horňák, L. (2011). *Sexuální výchova a příprava na partnerstvo osob s mentálním postižením*. Prešov: Pedagogická fakulta Prešovskej univerzity v Prešove.
- [7] Mandzáková, S. (2013). *Sexuální a partnerský život osob s mentálním postižením*. Praha: Portál.
- [8] Mioviský, M. (2006). *Kvalitativní přístup a metody v psychologickém výzkumu*. Praha: GRADA.
- [9] Štěrbová, D. (2007). *Sexualita osob s mentálním postižením*. Olomouc: Univerzita Palackého v Olomouci.
- [10] Švačiček, R., & Šedová, K. a kol. (2014). *Kvalitativní výzkum v pedagogických vědách*. Praha: Portál.
- [11] Venglářová, M., & Eisner, P. (2013). *Sexualita osob s postižením a znevýhodněním*. Praha: Portál.

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# The Influences on the English mainstream primary school Special Educational Needs Coordinator (SENCO) in a quasi-market led national educational system

(overview essay)

**Andrew Smith**

**Abstract:** *This paper reflects on the role of the English primary school Special Educational Needs Co-ordinator (SENCO) through a political perspective which explores how SENCOs function in their schools within an increasingly market-led Education system with its high-stakes national assessment regime and the growth of Academies and Free Schools which sit outside of Local Authority responsibility and influence. The concepts of 'performativity', 'control' and the SENCO as 'leader' are discussed.*

**Keywords:** *Special Educational Needs Co-ordinator (SENCO), primary school, quasi-marketplace, performativity, leadership*

## 1 Introduction

This review paper follows on from a previous paper on the English primary school Special Educational Needs Coordinator (SENCO) (Smith, 2020) and is designed as a companion piece. Its focus is on the role of the SENCO at work and the varied cultural and political influences which impact upon their performance and ability to do their job in leading provision for learners with Special Educational Needs (SEN) in their schools; this is interrelated with the nature of employment relationships affecting motivation and commitment as the SENCO acts and performs their role within the complex organisational system and performativity-rich culture of their school which is itself highly influenced by the long-established marketization of Education nationally. This review paper draws upon a range of literature and sources which are historical in nature, however the critical commentary and observations within these sources do have a direct relevance and influence on the current culture and climate in English primary schools.

## 1.1 Aims

The purpose of this review paper is to further explore the role of the English mainstream primary school Special Educational Needs Coordinator but in the context of their working conditions and the ways in which their role as a leader is perceived and enacted across a variety of primary schools. This paper is primarily designed as a model for further comparative study, however it is researched and presented through a political lens which underpins the reviewer's position and, as such, it is open to critical interrogation and commentary.

## 2 Methods

### a) Revisiting the role of the SENCO

The DfE/DH (2015) Code of Practice 0 to 25 states that the governing bodies of maintained mainstream schools and the proprietors of mainstream academy schools (including free schools) 'must ensure that there is a qualified teacher designated as SENCO for the school' (p. 97). The SENCO has the day-to-day responsibility for the operation of the school's Special Educational Needs (SEN) policy and the coordination of specific provision made to support individual children with SEN. In this role, the SENCO acts as the agent for their Head-teacher and board of governors who hold the responsibility for the overall management and quality of that provision within their school. A direction is also made that if the appointed SENCO in the school has not previously been the SENCO at that or any other school for a total period of more than twelve months they must achieve a National Award in Special Educational Needs Coordination within three years of appointment; this award being at post-graduate (national level 7) status which is accredited by a university or Higher Education Institution (HEI).

The requirement for schools to appoint a SENCO to coordinate provision for pupils with SEN has existed since the adoption by all state funded schools of the Department for Education and Employment (DfEE) (1994) Code of Practice on the Identification and Assessment of Pupils with Special Educational Needs. In their position within the school, the SENCO became central to the provision, procedures, funding and practices related to meeting the needs of pupils with SEN. The current DfE/DH (2015) Code of Practice 0 to 25 has built upon this range of responsibilities by stating that all schools must ensure that there is a qualified teacher designated as SENCO and that the SENCO has sufficient time and resources to carry out their role. All maintained schools, academies and free schools accept that they have responsibilities for special needs and that someone has to be named as their SENCO (Cowne et al., 2015). However, primary school SENCOs were already, before the introduction of the 2015 Code, full or part-time teachers and these SEN coordination



responsibilities were additional to their normal class-teaching work-load; this multi-faceted role usually resulted in a busy SENCO trying to balance their varying responsibilities. This dual identity is difficult to define as the SENCO job and role are embedded within the identity of the SENCO as, first and foremost, a teacher. However, this is not just specific to SENCOs as other teachers in primary schools also combine a range of duties with their whole-class teaching commitments.

## **b) Exploring the SENCO role within the construct of a Market-led Economy (schools in the 'quasi-marketplace')**

The SENCO is engaged with the Headteacher and governing body in determining the strategic development of SEN policy and provision in the school. The DfE (2015) Code of Practice makes it clear that, "They will be most effective in that role if they are part of the school leadership team" (p. 97). In this respect (the SENCO as a leader) there is an inconsistency between the experiences of SENCOs across schools as some are supported and encouraged to develop as strategic leaders whilst others are not, instead they become managers and administrators with restricted leadership responsibilities as the school's Headteacher, or Chief Executive if the school is a member of an Academy Trust (or equivalent), makes and takes all the key strategic decisions. This, in part, is due to the sustained pressure upon schools to improve pupil performance against national targets and to become more financially sustainable in a climate where Education has become a 'quasi-marketplace' with a greater decentralisation of powers to schools and an increasing emphasis on standards, accountability and competition. Scott (1998) stated, in the language of a pure market-led organisation, that,

'The effectiveness of market-controlled organizations is directly determined by their customers: if their interests are satisfied, then they will continue to supply the inputs required by the organization; if not, then they can withhold their contributions, causing the organization to suffer and perhaps ultimately to fail.' (p. 99)

With schools in the quasi-marketplace the customers referred to by Scott equate to parents, with schools being in competition for these customers. Bush and Bell (2006) stated that the expectation imposed upon schools to act in this competitive, market-driven manner has increasingly created school leaders who have to meet narrowly imposed targets and face penalties, 'including dismissal, if they do not succeed' (p. 13) with head-teachers and senior educational managers being particularly vulnerable to such negative effects.

The SENCO role has been interpreted as having a leadership function in every Code of Practice since 1994, thus the evolution of the SENCO into a school leader is significantly influenced by the informal cultures of their individual schools and how this culture has been moulded by the market-led forces within a globalised system

of performativity-led education. It is in this context of the school in the marketplace that the SENCO role is next explored.

### **3 Results and Discussion**

#### **3.1 The 'Quasi-Marketization' of Schools through Party Political Reform**

This paper is not focused on the changing nature of the English school system, but it is important to briefly explore the increasing marketization of schools as this phenomenon underpins performativity and holds together the varied influences impacting on the SENCO and how he/she does their job. This marketization stemmed, in the main, from the 1988 Education Reform Act which became legislation under the Thatcher Conservative Government. This act created the local management of schools (LMS), schools with Grant Maintained Status (GMS), per-capita funding and league tables of standard assessment tests (SATs) results, alongside greater parental choice and a rolling-back of Local Authority control and support. Post-1988 schools were encouraged to opt-out of Local Authority control due to being given considerable financial incentives if they adopted full Grant Maintained Status with its direct funding from the government. West and Pennell (2002) stated that the Conservative reforms were designed to bring market forces into the school-based education system to make it more consumer-orientated with the emphasis on consumer choice anchored in an overarching belief in 'the superiority of market forces as a means of organising education and society generally' (p. 3)

Although Grant Maintained status was abolished by the 1998 School Standards Framework Act the financial situation of those schools was protected by what became known as 'transitional funding' and the growth, under the New Labour government's Technology Colleges Programme introduced in 1993, of a range of specialist schools with enhanced funding leading to the setting up of City Academies as public-funded independent schools with substantial private and voluntary sector sponsorship having to be in place where the aim was to replace schools that were failing or schools that needed 'an extra boost' (Times Educational Supplement, 2000). These significant changes in schooling underpinned the Conservative Party-led Coalition Government (from 2010–2015) and then Conservative-led Government (from 2015 to the present) political drive for increased academisation, the creation of Free-Schools and the continuingly re-surfacing arguments around the potential of re-establishing selective grammar schools.

Outside of the private/independent sector there are no direct official fees paid by parents for school places and so parents are not engaged in a commodities market as such but instead there is what has been called a 'quasi-market' (Le Grand and

Bartlett, 1993) where there was the potential to lead to 'popular' and 'unpopular' schools, over-subscription on pupil places and even discrimination against children with special educational needs and those from low-income or non-traditional family structures. Riddell (2005) identified how some middle-class parents would move location and/or hire private tutors to get their child into what was perceived as a good school through their interrogation of published league table results. Riddell made the point that these tactics widened the class divide as poorer and working-class parents could not afford to play the market in schools in these ways to the same extent. Browne (2007) noted that:

'A recent survey suggested that most parents are prepared to move house to get the catchment area of a good school. Many of those are prepared to pay higher house prices to do so, effectively buying a better state education.' (p. 11)

The idea for new schools fuelled the Conservative Party's drive for sanctioning Free Schools set up by groups of parents, education charities, philanthropists and trusts; Rikowski (2007) stated that this deepened the quasi-marketization of the school system by the 'creation of more schools with low or zero accountability' (p. 3) to the Local Authority. However, the impact of the quasi-marketplace in schools was not simply related to parental choice and the growth of school leadership into a business-orientated function, as schools 'market-shaped' job roles through the underpinning requirements of staff payment linked to pupil performance, frequent monitoring by both internal (school) processes and formal inspection by The Office for Standards in Education (OFSTED). This was accompanied by public and media exposure through the publication of pupil performance results which parents compared and contrasted. Garner, Hinchcliffe and Sandor (1995) made the key point that this compulsory scrutiny,

'...has been underpinned by an apparent wish, on the part of central government, to reduce teacher autonomy and power. This is particularly apparent with respect to the taught curriculum which has become the property of successive Conservative governments. In the period after 1988, control and criticism of teachers were combined. Legislation was introduced to govern their training and work-practices, and it occurred alongside a systematic, orchestrated criticism of the profession, in which teachers' voices have been largely neglected, their opinions overridden, and their concerns dismissed.' (p. x)

According to this, now thirty-two-year-old view, schools and teachers had to comply with the legislation and systems set out for them and only recently have schools been allowed more freedom from direct government control but only by being a part of an academy trust, a free school or their equivalent.

### 3.2 Performativity and Conformity in Schools

The term 'performativity' was created by Lyotard (1984) in his thesis entitled 'The Postmodern Condition'; this concept was applied to the emphasis placed on the use of outcome-related performance indicators. In many respects this translates into the loss of opportunity for the 'teacher-voice' to be heard, together with a remaining central government control of the content of the curriculum, the high-stakes assessment regime and, to some extent, how the curriculum is taught in the classroom thus creating a level of performativity where teachers have been forced to comply with these imposed outcome-related structures. Garner, Hinchcliffe and Sandor (1995) continued their theme of diminished teacher autonomy by stating that teachers had not been given the opportunity to think about their work or were enabled to deliver teaching and learning activities in an alternative way to the expectations set by national strategies and the directives set by their head-teachers due to a fear of being identified as not complying with the government's accepted *modus operandi* and thus opened themselves to censure and disciplinary action. This fear identified by Garner et al., when writing under a Conservative government over thirty years ago, was also identified by Thring (1998) who, writing and researching at the time of the New Labour Government, stated that,

'Teachers' authority over curriculum and its management has been shamefully usurped, and in consequence we suffer a neutered powerlessness to effect change or have any influence over how it is imposed... Staffrooms now ring to the zombie reiteration of mantras issuing from our new directors of orthodoxy concerning standards, training and 'improvement', and a sinking sensation that whatever cannot be measured we should not be doing... Teachers have always been fundamentally social creatures, seeking consort with colleagues and harmony with their classes, but the recent policy of vilification by results is crushing teachers' individual vitality. Change in education is now propelled by abhorrence rather than compassion.' (p. 3-4)

Garner, Hinchcliffe and Sandor (1995) noted that this level of conformity and direction had to be acted upon and absorbed by all teachers, however those teachers working in the field of special education (particularly SENCOs) had to act upon/absorb all the general education directives in addition to those specifically targeted on, and around, pupils with special educational needs and disabilities. As a result teachers (and SENCOs) still had to perform and be assessed according to criteria into which they had little direct input apart from small-time frames where Green Papers were made available by central government for comment/response. Any real dialogue between the profession and central government did not exist and was not encouraged as those identified as questioning government policy and practice were called

‘the new enemies of promise’ by Michael Gove, the Conservative Party’s Secretary of State for Education (Gove, M. 2013); in this context, Thring’s description of teachers suffering a ‘neutered powerlessness’ had a particular resonance.

For the SENCO, the focus on the requirement to monitor pupil performance and achievement is a key part of the teaching process, however when this data collection becomes the self-fulfilling prophecy of the teaching process as defined by a regime of high-stakes, narrowly focused quantitative assessment which is then made public through the use of league tables and inspection reports this, according to Glazzard (2014), marginalises pupils who have barriers to their learning and/or participation. This performativity culture and mode of regulation created what Perryman (2006) called the process of ‘performing the normal within a particular discourse’ (p. 150); this could be interpreted as learning and teaching being enacted in a prescribed manner with school policies and documentation reflecting the expected discourse which is strongly influenced and formed by the emphasis on meeting pupil performance targets within financial constraints. Jeffrey (2002) particularly noted the link between this sort of performativity and the school as an organisation in the quasi-marketplace:

‘A performativity discourse currently pervades teachers’ work. It is a discourse that relies on teachers and schools instituting self-disciplinary measures to satisfy newly transparent public accountability and it operates alongside a market discourse.’ (p. 1)

This adherence to rigid criteria is in direct opposition to the ideas of diversity rather than conformity and has a particularly detrimental impact on the work of those teachers and educators who would serve their pupils less well if they are forced into, what Firth (1998) called, a preconceived ‘mould’; the mould in this case relating to set ways of working, teaching, communicating, structuring lessons and the reporting of pupil performance data. This performance-obsessed regime created the environment where teachers not conforming to this rigid set of criteria pertaining to pupil progress and levels of attainment were automatically considered to be non-effective. To be considered ‘effective’ these teachers were then carefully monitored and frequently assessed by headteachers with the aim of replicating the prescribed effectiveness factors in lesson planning, lesson delivery/teaching, pupil record-keeping and assessment as practiced across the school (Perryman, 2006). This had its links with normalization where any behaviour which is judged as ‘normal’ becomes the *only* acceptable behaviour with anything deviating from this norm being assessed and then judged as deviant. Hamilton (1997) made this link to education:

‘There is, it appears, a plague on all our schools. Teachers have been infected, school organisation has been contaminated and classroom practices have become degenerative and dysfunctional. In short, schools have become sick institutions.’ (p. 126)

Perryman (2006) linked this to assessment, appraisal, performance review and evaluation as teachers became agents and subjects of measurements. This was not only recognised in terms of school-based assessments only; Smith (2016) made a link to a global phenomenon which he believed was invasive in all areas of international education. Smith insisted that for over the past thirty years there had been a rapid expansion of embedded standardised testing linked to high-stakes outcomes with the use of assessment as a policy-tool being legitimised in order to measure education quality worldwide. Smith names this as a global testing culture which permeated all aspects of education from financing, parental involvement to pupil and teacher beliefs and practices where the reinforcing nature of this global testing culture led to a climate where standardised testing became synonymous with accountability which, in turn, was synonymous with education quality.

### **3.3 Increasing Teacher/SENCO 'Stress' and 'Burnout'**

This highly pressurised culture has been identified with a noted increased level of stress in teachers and SENCOs. Pearson (2012) related a SENCO's comments on 'people leaving/feeling like they are not equipped to do the job'; this resonates with something that psychologists have identified as 'imposter syndrome' (Chittock, 2013) Impostor Syndrome is a temporary loss of confidence about a person's own ability to fulfil a role, although it is recognised that it is a temporary phase that often passes with the right kind of support from managers and colleagues. A study by MacBride (1983) explored the misconceptions of job burnout, a term describing a condition in which a person changes in his/her work situation from a state of high motivation and efficiency to apathy, inefficiency and may even demonstrate mild or severe psychological disturbance; these misconceptions included the belief that it was a sudden and dramatic happening which was inevitable in certain high-pressured professions. More gradual burnout was thought to be indicated by certain signals such as loss of job satisfaction, frequent sickness and minor medical ailments, interference with job performance and morale, gradual loss of confidence and deteriorating productivity accompanied by depression. Brill (1984) suggested that stress could lead to burnout but not all who were stressed became victims; a burnout victim being someone who had functioned adequately for a time in their job but who would not recover to previous levels of high performance without outside help or environmental rearrangement. MacBride's list of burnout symptoms are supported by Lowenstein's (1991) symptoms of teacher burnout which included such feelings as physical, emotional and attitudinal exhaustion, leading to irritability:

'Others include feelings of helplessness, hopelessness, disenfranchisement as well as somatic states of physical exhaustion including proneness to accidents and increased susceptibility to illness. To these may be added a sense of guilt, depression, a feeling of disorganisation, shock, volatile emotion and loneliness.' (p. 12–13)

Some of the commentaries made by SENCOs in other research echo this picture of a teacher under considerable stress. Beeby (2013) collected the narratives of SENCOs who reported on the sheer scope and scale of their work with rising pupil numbers on their schools' SEN lists – particularly those with speech, language and communication and emotional/social needs – and the demands of liaising with external agencies and with parents/carers all exacerbated by their increasing administrative load and the amount of support they had to give to fellow teachers and to teaching assistants. Beeby said, of her own experience as a SENCO and the pressures of working in partnership with parents and with her colleagues in her school, that

'Every parent can only see their own child's needs; each colleague is focussed on the pupils currently in his/her class and every outside agency is pushing its own agenda... We have responsibilities to all our pupils and sometimes the demands made by parents and others involved with a particular child becomes impractical or even unreasonable – it actually feels as though there are aspects of their responsibility that they would rather we take on.' (p. 9)

This is an authentic SENCO's 'voice' which gives weight to Drifte's (2005) observation that many SENCOs feel that they have, '...drawn the short straw, have been pushed in at the deep end and are totally overwhelmed by the enormity of their responsibilities' (p. xiii). These demands could also be viewed as fuelling the pressure of a performativity-driven ethos with the potential to stifle imaginative approaches and risk-taking when leading special educational needs provision in their schools. However, 'burnout' does not only affect teachers who have been in the profession for a length of time, Goddard et al. (2006) made the key point that a great deal of the past research into 'burnout' has concentrated on populations of established workers and not into 'entry-level' populations. Although having a level of teacher experience, newly appointed SENCOs can be interpreted as being classified as entry-level into this new and complex post. Fimian and Blanton (1987) compared burnout between less and more experienced teachers and discovered that burnout rates were almost identical; this type of finding challenges the normally perceived wisdom that burnout takes a degree of time to develop and that it is unlikely that it will happen at the beginning (or close to the beginning) of a teacher's career, in this case a significant number of established teachers taking up new positions as SENCOs may enter this role already feeling some of the effects of teacher burnout.

### **3.4 The Professional Identity of the SENCO**

Most headteachers of primary schools would say that they are generally engaged in considering the implications of staff relationships in order to enable a community of learning in their schools, this is so that all members of staff (regardless of status)

work in a collaborative and supportive partnership with each other; however, Lee (2014) highlighted the situation in modern work cultures which

‘...value toughness, but the downside is isolation and believing that asking for help makes you look weak. Too thin-skinned and you’ll find robust feedback grinds you down, but if you convey zero vulnerability you’ll easily convey the idea that you care little about how other people see you or how they feel.’ (p. 4)

Lee continued by saying that leaders who revealed a little vulnerability were often the most respected. So this presents a difficult challenge for SENCOs, particularly if they are new, or fairly new, in post. They may understand the requirements of the DfE (2015) Code of Practice, how to develop and manage effective provision for pupils with barriers to their learning and engage with external professionals – in other words, the management function which is defined by performativity, but the skills required for leading learning and teaching, innovating and feeling confident to take risks may fall outside of their experience and may even be looked upon in their school as undesirable factors as they can tend to make assertive and knowledgeable professionals question and challenge the established norms. A SENCO who does this may be identified as a member of ‘the blob’, a phrase coined by Woodhead (2002) and further developed by Michael Gove, the former Coalition and Conservative Government Secretary of State for Education who applied it to what he termed ‘the educational establishment’ who opposed his ideas and policies (Robinson, 2014). This is leadership in relation to ‘what matters’ and requires the SENCO to consider their performance and influence not only in terms of the old educational establishment (as vilified by those such as Woodhead and Gove) but particularly against the challenges they set themselves in relation to innovation and the critical interrogation of the market-driven educational establishment in order to develop effective special educational needs provision in their schools, to enhance their own status and define their identity as strategic leaders able to influence others to drive forward provision for SEN across the school.

This created performativity is threaded through how SENCOs view their specialist role and their professional identity within that role; it can also be interpreted as one of the threats which impact on SENCO autonomy, status and scope. However, there is an important counter-argument which needs to be recognised; this counter-argument accuses teachers themselves of not actively engaging with government guidance, policy and legislation during any consultation stage where their voice and views were being honestly sought, leaving it to their head-teachers and governors to do this whilst their teaching staff took up a far more passive role. This concept of teachers adopting a passive role and not ‘stepping up’ and actively engaging and/or innovating beyond the minimum requirements of their job is explored through the framework where the SENCO role can be described according to the two hemispheres of



their role, their Legal Contract and their Psychological Contract. The Legal Contract for a SENCO is formally presented and set by the DfE/DH (2015) Code of Practice for Special Educational Needs: 0 to 25, complemented by the outcomes of the DCSF (2009) National Award for SEN Coordination. This provides SENCOs, aspiring SENCOs and their head-teachers with a defined field of work which forms their Legal Contract. The formal role of the SENCO according to this Legal Contract is outlined in the first review paper on SEN and the evolution of the primary school SENCO in England by Smith (2020). However, what is important is that the school response and structure for leadership across the range of vulnerable groups of pupils identified (in the Code) is well managed, well led, and collaboratively shared across the whole school. It is also identified that the SENCO is expected to provide professional guidance to colleagues and to work closely with staff, parents/carers and with other agencies; the SENCO should also be aware of the services provided by external providers/organisations and be able to work with other professionals providing independent support to families of children with SEND. However, once again, this was phrased as a 'should' rather than a 'must' in the Code, replicating the level of local interpretation which existed through all previous legislation and guidance relating to the SENCO role.

### **3.5 The SENCO's Psychological Contract**

The Psychological Contract is the main driving force behind any teacher who sees beyond his/her own job description and, according to O' Donohue (2014), provides a well-established construct for 'better understanding the exchange that characterises the worker-organisation relationship' (p. 131) and the individual's subjective understanding of 'obligation-based exchanges with the organisation' (p. 131). The SENCO provides a significant cross-school function and their work is threaded through the successful application of a wide range of school policies beyond the remit of the policy for special educational needs and disability; thus the influence of the SENCO is felt across the whole school population and community and not just limited to implementing the practical application of the school's policy for SEN. This whole-school influence sits at the core of the SENCO's Psychological Contract and the opportunities to engage it.

Curtis and Curtis (1995) and York (1995) argued that human behaviour is based on needs, drives and aspirations and behaviour is caused by, and causes, these needs, drives and aspirations – that people do things because they need to (from necessity), feel driven towards them (pushed/urged in a certain direction) and aspire to a certain status (the desire). These are all concerned with motivation; for SENCOs this motivation could be designed to achieve necessities such as responsibility, recognition, status, higher pay and job satisfaction, although these motivational factors are common to many professions and areas of work and are not confined to SENCOs alone.

It is assumed that the characteristics, attitudes, features, dispositions and qualities which define a 'good' teacher such as enthusiasm, enjoyment, imagination and commitment are freely given by the vast majority of teachers and help create the 'buzz' perceived in the classroom and around the school community as a whole. These factors did not form a part of the Legal Contract for which a teacher was paid thus they formed the basis of the Psychological Contract. However, for SENCOs (and for all teachers), the delineation between Legal and Psychological Contracts is not clear-cut as the continuing ambiguity of the new DfE/DH (2015) Code around the SENCOs' duties, responsibilities and field of influence blurred the difference and created either an inter-relation of the Legal and Psychological Contracts or confusion leading to some SENCOs feeling exploited, over-worked and/or misinformed by the senior leadership within their schools. For example, a SENCO reported:

'The real issue for me is time! I need time to: support parents, hold reviews; liaise with staff; liaise with learning support staff; liaise with occupational therapists and physiotherapists; ring parents to ask them to arrange an appointment; arrange special language assessments; speak to the educational psychologists; see the English as a second language staff; help write IEPs and so on. I have had Friday afternoons since September as non-contact time to try and fulfil this role as long as the head-teacher is available to have my class. All this will lead to overload. I feel there is a mistake just waiting to happen. Something waiting to be forgotten. It is difficult to fulfil all my roles within the school well.' (Wolfendale, 1997, p. 22–23)

This was a SENCO speaking twenty-three years ago, but is this story an example of the SENCO being unable to balance her teaching duties and SENCO responsibilities rather than a simplistic analysis of bad management by her school leaders? To automatically assume that all SENCOs are completely effective/efficient with any limitations imposed on them always being created by their senior leadership team/head-teachers would be an incorrect and sweeping assumption to make. However, negative factors experienced by this SENCO in 1997 are still pertinent to today's primary school SENCO.

In the light of this relationship between the SENCO (employee) and the head-teacher/governors (employers) the Psychological Contract expresses the idea that each side has expectations of the other. According to Boddy and Paton (2011) this is 'the set of understandings people have regarding the commitments made between themselves and their organisation' (p. 454) and that both parties modify these expectations as the relationship develops, reflecting the influence of changing organisational (school) contexts or individual circumstances. Rousseau and Schalk (2000) agreed with this definition and referred to Psychological Contracts as 'the belief systems of individual workers and their employers regarding mutual obligations'

(p. 1). However, these Psychological Contracts are fragile and vulnerable; Boddy and Paton (2011) stressed the constant risk factor that a contract which satisfied both parties at one time may cease to do so in the future, thus having consequences in terms of attitudes and behaviours. Guest (2004) researched into the effect of rapid economic change and its effect on employee perceptions of the state of the Psychological Contract when competitive business conditions led an employer to make changes which the employees saw as breaking the Contract. Deery et al. (2006) completed further research in the field and studied employees who perceived their employer had breached their Psychological Contract which led employees to have lower trust in management, to experience less co-operative employment relations, and to have higher rates of absence. Boddy and Paton (2011) make the link with rapid change in the business world where,

‘previously stable Psychological Contracts are easily broken. Technological changes and increased competition lead senior management to change employment policies and working conditions, or put staff under great pressure to meet demanding performance targets.’ (p. 456)

Rapid change in the world of business has been equalled by rapid change in the world of Education particularly related to the political and ideological imposition of the quasi-marketplace where business-orientated methods and ethics and the standards-agenda became inter-related with the ‘duty-of-care’ traditionally embedded within the philosophy of teaching, as teachers still strived to provide the best learning and socially inclusive environment they could for the pupils in their classes but set within a school culture highly influenced by competition, changing employment policies and working conditions which were no longer stable.

### **3.6 The Contextual Variety and how this influences the Status and Conditions of Service of the SENCO as a School Leader.**

In very simple terms, the Contextual Variety can be defined as the eclectic definition of the SENCO role as understood by school governors and head-teachers and how they realised this role through ‘job descriptions’ stating key responsibilities around managing the day-to-day provision for pupils with special educational needs and disabilities, and their support of the SENCO in their school.

Ekins (2012) believed that the variability in the SENCO role was due to contextual differences and so there was a need to explore these unique contexts. These unique contexts could have been created by not having any common (or generic) working practices apart from that presented in the Legal Contract, and even then the Legal Contract was an interpretation of the national legislation, guidance and OFSTED inspection regime by each individual head-teacher who then worked with their staff

to establish the organisational ethos/climate in which the SENCO had to perform. Ekins (2012) listed contextual differences such as the size and location of the SENCO's school and the number of pupils with special educational needs and/or disabilities on the SEN list:

'A SENCO working in a large inner-city school with high levels of pupils identified as having SEN and/or disabilities may therefore have a quite different role to a SENCO working in a small rural school with low numbers of pupils identified as having SEN and/or disabilities. The positioning and status of the role and overall approach to meeting the needs of pupils with SEN and/or disabilities will also impact on how the role is perceived and developed.' (p. 71)

In addition to the significant differences identified above there has been the on-going debate around the status of the SENCO's role and the management of SEN provision in the school with their responsibility for meeting the needs of individual pupils with SEND. The DfES (2001) Code of Practice suggested that the direct line manager for the SENCO should be the head-teacher as the SENCO was responsible for the day-to-day operation of the SEN policy whilst the head-teacher was responsible for the day-to-day management of the SEN policy. However, a variation was noticed across schools in relation to the status of the SENCO as a senior/strategic leader with additional responsibilities; in connection with this variation, Ekins (2012) stated that, 'For many SENCOs, the role has therefore become all encompassing, moving from a Special Educational Needs Coordinator to Inclusion Coordinator, with responsibility for monitoring the progress and provision for a widening number of 'vulnerable groups' within the school context' (p. 71)

Contextual differences are further complicated by this expansion of the SENCO role in some schools and the interplay in how teachers, teaching assistants, other professionals, parents and pupils define how a SENCO should operate and perform. A final complication is how the SENCOs themselves understand and define their own duties and responsibilities and how this changes over time. Although the DfE/DH (2015) Code defined the responsibilities for SENCOs and the National Award for SEN Coordination clearly presented specific learning outcomes for mandatory training, each school and SENCO naturally interpreted and enacted the role in their own way according to school priorities (the 'culture' of the school as created through the performativity-rich-mixture of a high-stakes national assessments programme, published league tables setting school against school, an invasive inspection regime and frequent political/ideological interference). Rosen-Webb (2011) indicated that, 'The SENCO role is unclear in both policy contexts and in the research literature' (p. 159) and Pearson and Ralph (2007) explored this idea of lack of clarity on the role and stating that 'there is a high degree of local interpretation at school level.' (p. 38). This

high degree of interpretation was particularly highlighted in the National Union of Teachers' Survey of SENCOs in April 2012 where many SENCOs pointed to a variety of practice between schools and suggested that the 2001 Code of Practice was being applied inconsistently. This identification of inconsistency was also set against a significant backdrop of decreasing external support to their schools for pupils with SEN through the reduction of Local Authority services and this, in turn, was demonstrated through the SENCOs' pessimistic view of the future.

Perhaps one of the most obvious contrasts across schools is the difference in status the SENCO holds as a strategic leader. The SENCO might be a catalyst for change and development in their school but without being empowered and fully supported by their head-teachers and governing bodies any change cannot be expected or, at best, be limited in scope and impact. All of the previously outlined legislation and guidance mentioned the importance of the SENCO being in a leadership role, however research supported the need for the SENCO to operate in this leadership capacity but highlighted that considerable variation existed in practice (Szwed, 2007; Mackenzie, 2007). The recommendation for leadership to be a requirement of the role was presented by the House of Commons Education and Skills Select Committee (2006) and although supported in the SEN Co-ordination Award (TDA, 2009) and its revision in the National Award for SEN Co-ordination (National College for Teaching & Leadership, 2014) it was not made concrete in legislation. Tissot (2013) stated that this led to deviation in practice which enhanced the tension between the theoretical status of SENCOs as senior leaders and the day-to-day coordination work which supported the school's SEN policy with the making of decisions which formed part of this. Previous to this, Layton (2005) illustrated some of the difficulties that arose where there was no clear expectation of SENCOs as leaders with some SENCOs believing that key people and agencies did not see them in a leadership role. Cole (2005) warned that the SENCO role was becoming perceived as low status as it was seen as an operational/managerial one rather than a senior and strategic leadership position. This lack of empowerment was earlier highlighted by Cowne (2000) who argued that many SENCOs did not feel empowered to become involved in wider policy and resourcing issues in their schools as they may not have been given access to information or felt that they could ask, as a result any strategic coordination for special needs provision remained in the remit of the head-teacher and governors. This lack of understanding of the SENCO function by head-teachers and governors was previously identified by Wolfendale (1997) after the implementation of the 1994 Code of Practice when she reported the views of a parent at a Council for Disabled Children workshop:

'What the Code did was to provide a universal framework which has highlighted the gaps, as well as emphasising the positive. Teachers and SENCOs do need

time to make the system work. But isn't that where school SEN policies should work? I don't believe that sufficient governors really understand the importance of both non-teaching time and the calibre of person appointed to be the SENCO. I know a school where the main qualification was a licence to drive the school minibus!' (p. 74)

This astute parental view of the lack of understanding by governors about the importance of the SENCO role complemented the findings of Lewis et al. (1997), in a report on a national survey of perceptions of SENCOs carried out on behalf of the National Union of Teachers (NUT); this report emphasised the challenges of implementing the SENCO role effectively. Lewis commented that:

'The gulf between perceived expectations of the SENCO role in the light of the Code of Practice and the resources available to fill those expectations is likely to lead to increasing dissatisfaction from teachers, education managers, parents and school governors.' (p. 6)

In this NUT report, a primary cause for concern was the very limited non-contact/non-teaching time for SENCOs, the non-standardised processes and procedures across schools and the overly bureaucratic dimensions of making the Code of Practice work without additional resources or funding. This was twenty-three years ago and related to the first (1994) Code of Practice, unfortunately (three Codes and over two decades later) these issues are still prevalent as some SENCOs are reporting that they are not being paid for their additional co-ordination role with a significant number of SENCOs stating that they have been given little (or no) protected time on their timetables to do the job or have been provided with adequate resources and administrative support. It appears that legislation develops and moves on but SENCO conditions of service remain unequal across schools.

## **4 Conclusion: School Culture, Control and the SENCO**

The long thirty-two year tradition (1988 to the present) of placing schools into competition within the marketplace provides the foundation for the Contextual Variety between schools and how the role of the SENCO is enacted within each one, however the reasons for contextual differences are more complex than this simple model suggests. Mullins (2005) stated that an underlying feature of the 'people-organisation relationship is management control and power' (p. 831) and that control systems exist in all spheres of the operations of the organisation and are a necessary part of the process of management. Tannenbaum (1968) saw control as an inherent characteristic of organisations:

‘Organization implies control...Organizations require a certain amount of conformity as well as the integration of diverse activities. It is the function of control to bring about conformance to organizational requirements and achievement of the ultimate purposes of the organization.’ (p. 3). Berry et al. (1995) took this to mean that management control was a process both for motivating and inspiring people to perform activities that furthered the organization’s goals and for detecting and correcting ‘unintentional performance errors and intentional irregularities’ (p. 18). Supporting this idea, and linking to the connection between control and delegation, Payne and Payne (1994) defined control as ‘monitoring the performance of the delegated task so that the expected results are successfully achieved’ (p. 161) without the implication that control is a senior management function only as the person delegated the task also identifies and operates control in a day-to-day manner – which is very close to the leadership/management relationship traditionally established between a head-teacher and his/her SENCO.

Mullins (2005) stated that control can stand for reliability, order and stability with staff wanting to know what is expected of them and how well they are performing as ‘control is a basis for training needs, the motivation to achieve standards and for the development of individuals’ (p. 832) Tulgan (2001) stated ‘It is critical to make very clear to individual contributors exactly what performance – what results, within what guidelines, parameters and deadlines – the organization needs, and will therefore reward’ (p. 351). However, Wilson (1999) argued that individuals are not passive objects of control as ‘They may accept, deny, react, reshape, rethink, acquiesce, rebel, or conform and create themselves within constraints imposed on them’ (p. 103). Mullen (2005) argued that most people show ambivalence towards control systems, not wishing to have them applied by others to their own performance they do recognise the usefulness and need for them in terms of the planning and organisation of work functions and by guiding and regulating staff activities. Mullen further stated that a ‘Lack of adequate supervision and control, or of an effective risk-management system, are a major feature of poor organisational performance and can even lead to the collapse of a company’ (p. 883).

Although the literature relating to ‘control’ is from the field of management and organisational behaviour it does translate directly to an educational context – for ‘organisation’ read ‘school’. The multi-factors involved in the school goals and objectives linked to SEN are moulded through an organisational structure which uses similar control mechanisms to promote a performativity-rich culture which is further influenced by diverse variables such as school size, location, history, funding levels, staff expertise/knowledge of pupils with SEND, the last OFSTED Report, the level and nature of flexible organisational control and delegation, and the vision and drive of the head-teacher and SENCO endorsed by the governing body and parents. These

individual school variables are firmly underpinned by a national standards culture still related to high stakes assessment and accountability, and the current political ideology of maintaining a very market-led national Education system where private enterprise is allowed to own Academy Trusts and Free Schools managed separately from the Local Authority, in effect being little more than private schools supported and funded by the state. It is within this complex culture that the English mainstream primary school SENCO has to work and thrive whilst maintaining a healthy work-life balance and sense of identity and status.

## References

- [1] Beeby, K. (2013). SENCOs are people too. *SEN*. May/June 2013. 64.
- [2] Berry, A., Broadbent, J. and Otley, D. (eds.) (1995) *Management Control: Theories, Issues and Practices*. London: Macmillan.
- [3] Boddy, D., and Paton, S. (2011). *Management: An introduction*. (5<sup>th</sup> edn). Harlow: Pearson Education Limited.
- [4] Brill, P. L. (1984). The Need for an Operational Definition of Burnout. *Family and Community Health*. 6 (4): p. 12–24.
- [5] Browne, A. (2007). Free our schools from a fatally flawed system. *The Observer*. 18<sup>th</sup> November. p. 11. [online] Available from: <http://observer.guardian.co.uk/comment/story/0..2212889.00.html>.
- [6] Bush, T., and Bell, L. (2006). *The Policy Context: The Principles and Practice of Educational Management*. London: Paul Chapman.
- [7] Chittock, M. (2013). 'Feeling a Fraud?' *Edge*. May/June 2013. London: Institute of Leadership and Management.
- [8] Cowne, E., Frankl, C., and Gerschel, L. (2015). *The SENCo Handbook: Leading and Managing a Whole School Approach* (6<sup>th</sup> edn). London: David Fulton.
- [9] Curtis, S., and Curtis, B. (1995). *Behaviour at Work*. London: Pitman.
- [10] Deery, S., Iverson, R., and Walsh, J. (2006) Towards a better understanding of Psychological Contract breach: A study of customer service employees. *Journal of Applied Psychology*. Vol 91 (1): p. 166–175.
- [11] DfEE (1994). *Code of Practice on the Identification and Assessment of Special Educational Needs*. London: Central Office of Information (ref EDUC J022465NJ 5/94).
- [12] DfE/DH (2015). *Special educational needs and disability code of practice: 0 to 25 years*. Ref: DFE-00205-2014 [Online] available at [www.gov.uk/government/consultations](http://www.gov.uk/government/consultations).
- [13] DfES (2001). *The Special Educational Needs Code of Practice*. Annesley: DfES Publications (ref. 581/2001).
- [14] Drifte, C. (2005). *The Manual for the Early Years SENCO*. London: Sage.
- [15] Ekins, A. (2012). *The Changing Face of Special Educational Needs: Impact and implications for SENCOs and their schools*. Abingdon: Routledge.
- [16] Fimian, M. J., and Blanton, L. P. (1987). Stress, burnout, and role problems among teacher trainees and first year teachers. *Journal of Occupational Behaviour*. (8): p. 157–165.
- [17] Garner, P., Hinchcliffe, V. and Sandor, S. (1995). *What Teachers Do – Developments in Special Education*. London: Paul Chapman.



- [18] Glazzard, J. (2014). The standards agenda: reflections of a special educational needs co-ordinator. *Support for Learning*. 29 (1): p. 39–53.
- [19] Goddard, R., O'Brien, P. and Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*. 32 (6): p. 857–874.
- [20] Goldstein, L. (2002). *Reclaiming caring in teaching and teacher education*. New York: Peter Lang.
- [21] Goodley, D. (1996). Tales of Hidden Lives: a critical examination of life history research with people who have learning difficulties. *Disability & Society*, 11 (3): p. 333–348.
- [22] Goodson, I. F. (2003). *Professional knowledge, professional lives: studies in education and change*. Maidenhead: Open University Press.
- [23] Gove, M. (2013). 'I refuse to surrender to the Marxist teachers hell-bent on destroying our schools: Education Secretary berates 'the new enemies of promise' for opposing his plans.' [Online]. Available at [www.dailymail.co.uk/debate/article-2298146](http://www.dailymail.co.uk/debate/article-2298146) (accessed 3.06.2014).
- [24] Guest, D. (2004). The psychology of the employment relationship: An analysis based on the Psychological Contract. *Applied Psychology*. 53 (4): p. 541–555.
- [25] Hamilton, D. (1997). Peddling feel-good fictions in, J. White and M. Barber, (eds.) *Perspectives on school effectiveness and school improvement*. London: Bedford Way Press. p. 125–130.
- [26] House of Commons Education and Skills Committee (2006). Special Educational Needs. Third Report of Session 2005–06, Volume 1 [HC 478-1]. London: The Stationery Office.
- [27] Jeffrey, B. (2002). Performativity and primary teacher relations. *Journal of Educational Policy*. 17 (5): p. 531–536.
- [28] Layton, L. (2005). Special educational needs coordinators and leadership: a role too far? *Support for Learning*. 20 (2): p. 53–60.
- [29] Le Grand, J., and Bartlett, W. (1993). (eds.) *Quasi-Markets and Social Policy*. London: Macmillan.
- [30] Lee, M. (2014) Transformational Leadership: is it time for a recall? *International Journal of management and Applied Research*. 1 (1): p. 17–29.
- [31] Lewis, A., Neil, S., and Campbell, J. (1997). SENCOs and the Code: A national survey. *Support for Learning*. 12 (1): p. 3–9
- [32] Lowenstein, L. (1991). Teacher Stress Leading to Burnout – Its Prevention and Cure. *Education Today* 41 (2): p. 12–13.
- [33] Lyotard, J. F. (1984). *The Postmodern Condition: A Report on Knowledge*. Vol 10. Manchester: Manchester University Press.
- [34] MacBride (1983). Burnout: Possible? Problematic? Preventable? *Canada's Mental Health*. 3 (1): p. 2–3 & 8.
- [35] MacKenzie, S. (2007). A review of recent developments in the role of the SENCO in the UK. *British Journal of Special Education*. 34 (4): p. 212–218.
- [36] Mullins, L (2005). *Management and Organisational Behaviour*. Harlow: Pearson Education.
- [37] O'Donohue, W., Martin, A., Nuttaneeya, T. (2015). Understanding individual responses to failure by the organisation to fulfil its obligations: Examining the influence of psychological capital and Psychological Contract type. *Human Resource Management Journal*. 25 (1): p. 131–147.
- [38] Payne, J. and Payne, S. (1994). *Letting go without losing control*. London: The Institute of Management/Pitman Publishing.
- [39] Pearson, S., & Ralph, S. (2007). The identity of SENCOs: insights through images. *Journal of Research in Special Educational Needs*. 7 (1): p. 36–45.
- [40] Riddell, M. (2005). Don't blame the children in the battle for parents' votes. *The Observer*. 1<sup>st</sup> May. p 18.

- [41] Rikowski, G. (2007). Driving Society Forward. Marketisation of the Schools System in England. [online] available at : [www.flowofideas.w.uk/?page=articles&sub=marketisationoftheschoolsysteminengland](http://www.flowofideas.w.uk/?page=articles&sub=marketisationoftheschoolsysteminengland) (Accessed 15. 11. 2016).
- [42] Robinson, N. (2014). *Michael Gove- Battling 'The Blob'* . [Online] available at : <http://www.bbc.co.uk/news/uk-politics-26008962> (accessed 22. 11. 2014).
- [43] Rose, R., and Howley, M. (2007). *Special Educational Needs in Inclusive Primary Classrooms*. London: Paul Chapman.
- [44] Rosen-Webb, S. M. (2011). Nobody tells you how to be a SENCO. *British Journal of Special Education*. 38 (4): p. 159–168.
- [45] Rousseau, D., and Schalk, R. (2000). *Psychological Contracts in Employment: Cross-national perspectives*. London: Sage.
- [46] Scott, W. R. (1998). Organizational Effectiveness. In: A. Harris, N. Bennet and M. Preedy, (eds.) *Organizational effectiveness and improvement in education*. (p. 96–108). Buckingham: Open University Press.
- [47] Smith, A. (2020). Special educational needs/disabilities and the evolution of the primary school Special Educational Needs Co-ordinator (SENCO) in England. *Journal of Exceptional People*. 2 (17): p. 75–93.
- [48] Smith, W. (2016). *The Global Testing Culture: Shaping education policy, perceptions and practice*. Oxford: Symposium Books.
- [49] Szwed, C. (2007). Reconsidering the role of the primary special educational needs coordinator: policy, practice and future priorities. *British Journal of Special Education*. 34 (2): p. 96–104.
- [50] Tannenbaum, A. S. (1968). *Control in Organizations*. New York: McGraw-Hill.
- [51] Thring, A. (1998). The Charm Dissolves Apace. *Education Today*. 48 (2): p. 3–8.
- [52] Tissot, C. (2013). The role of SENCOs as leaders. *British Journal of Special Education*. 40 (1): p. 33–40.
- [53] West, A. and Pennell, H. (2002). How new is New Labour? The quasi-market and English schools 1997 to 2001. *British Journal of Educational Studies*. 50 (2): p. 206–224.
- [54] Wilson, E. (1999). *Organisational Behaviour: A Critical Introduction*. Oxford: Oxford University Press.
- [55] Wolfendale, S. (ed) (1997). *Working With Parents of SEN Children After the Code of Practice*. London: David Fulton.
- [56] Woodhead, C. (2002). *Class War: the state of British education*. London: Little Brown.
- [57] York, A. (1995). *Managing for Success*. London: Cassell.

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# Poetotherapeutic and bibliotherapeutic intervention in the context of researches of the Institute of Special Pedagogical Studies, Faculty of Education, Palacky University in Olomouc (Czech Republic)

(overview essay)

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**Abstract:** *The paper deals with realized researches focused on the field of poetotherapeutic and bibliotherapeutic intervention, which took place in the first and second decade of the 21st century at the Institute of Special Pedagogical Studies Faculty of Education (PdFUP) in Olomouc. These studies focused on assessing the effectiveness of poetotherapy intervention in children with special needs education (SEN) and the respondents of the detoxification unit and were described in practical parts of Bachelor's and Diploma Theses of the students of the USS PdFUP. The authors of this paper allow readers to gain insight into the details of these professional works and provide not only an overview of these surveys, but also provide the candidates with the opportunity to compare the content of the subject under consideration and to assess the effectiveness of the methodologies used. At the end of this paper, the authors also contemplate other possibilities for further, possibly similar, research.*

**Keywords:** *Poetotherapeutic intervention, bibliotherapeutic intervention, special needs education, special pedagogical studies*

## 1 Introduction

Poetotherapeutic and bibliotherapeutic intervention, understood in terms of professionally and intentionally performed therapeutic activity, is still relatively little described phenomenon and its effects, advantages and disadvantages, indications and contraindications, setting and use of individual techniques and other details are not yet known to the wider and professional public and are not yet significantly elaborated. The main purpose of this paper was to find and organize all the researches

conducted so far to assess the effects of actively presented poetry and prose, whether they were active or only perceptual techniques. The aim of the bachelor and diploma theses described below was also to compare the effects of poetotherapeutic intervention in children with SEN, in adolescents and adult clients of addiction treatment facilities and in intact groups of the Czech population. Some works also dealt with comparing the effects of prosaic and poetic texts and comparing the effectiveness of various active and passive intervention techniques.

## 2 Beginning of the researches

The first survey conducted at the Institute of Special Pedagogical Studies of the Faculty of Education in Olomouc, which also marginally concerned poetotherapy, was a research aimed at assessing the preferences of children of special schools (now practical and special primary schools) in the presentation of poetic and prosaic text. The author of the research, D. Flassigová, presented two examples of spells in front of children. The first one was composed of sound-painting words that rhymed and formed rhythmic stanzas. The second spell was made up of the same sounds, but the rhythm and sound-images were disturbed. The task for the children was to recognize which of the spells brings good and which brings evil. In the second part of the experiment, short stories were presented to children. The first one was rhymed and the second one was not rhymed. After listening to them, the children should immediately write on a piece of paper which of them they liked.

The author worked with a relatively large sample of children ( $N = 77$ ), which she divided into four age groups (8–10, 11–12, 13–14, 15–16 years). The results of the survey were then evaluated separately in each group. In the overall assessment of the differences in preferences, the logical analysis of the data did not show any significant disproportion. Significant differences appeared only in more detailed assessment of results in the context of the monitored age categories.

Above all, the author's assumption that children of younger school age accept better versed verb formations has not been confirmed. The author tried to explain this result by methodological inaccuracies. However, she also considered the possibility of disturbing effects of rhymes and sound painting on the storyline. However, the order of the stories and spells presented and the fatigue factor of children could also play a role. However, the older group of children confirmed the assumption that the popularity of rhymed verbal formations decreases with the increasing age of children (groups 13–14, 15–16 years), (Flassigová, 2005).

The following part of the investigation was focused on monitoring the differences in perception of rhymed and non-rhymed prose verbal formations between girls and boys. It has not been confirmed that girls are more sensitive and receptive to versed formations and that they accept them more positively than boys. After evaluating all

the data obtained, the researcher concluded that “the perception of poetry in children (and probably also in adults) cannot be compared to their general sensitivity (Flassigová, 2005, p. 34).

### 3 Ongoing researches

Further research did not wait long. In 2008 P. Froncová, a student of the SSSS PdFUP, described in her bachelor thesis some used poetotherapy and music therapy techniques that can be successfully used in special elementary schools for children aged 8–17 years (N = 10, 4 girls, 6 boys). The aim of this work was to find out how children with multiple disabilities perceive and experience poetotherapy and music therapy intervention. The author assumed that by combining these two expressive therapies, she would achieve greater positive responses that would be manifested in children by increased emotions and positive behavioral changes. She obtained the results on the basis of the participating observation and supplemented them also with individual interviews with the monitored children. Everything was complemented and compared with the personal history of children and the author tried to find some connection between specific diagnoses of children and their experience during poetotherapeutic and music therapy interventions.

The following indicators were monitored in the context of music therapy, poetotherapy and combined music therapy and poetotherapy interventions: Children’s facial expression, their eye contact, verbal communication, nonverbal communication, activity and motor responses to the change of music and musical instruments. At the end of her investigation, the author came to modest results, suggesting that children accept “action” techniques of work better and prefer more repetitive schemes. No matter if they were music therapy or poetotherapy techniques (Froncová, 2008).

Subsequent research concerning the use of elements of poetotherapy is dated 2011. The aim of the bachelor thesis of M. Šotolová was the issue of the use of poetotherapy in the context of touch therapy in children with intellectual disabilities. The author assumed that by combining touches (massages) and presented rhythmic poems, she would achieve greater effects as measured by the increased emotional manifestations of children. The monitored sample of children included ages 3–7 years (N = 10, 3 girls, 7 boys). These were children with mild mental retardation, three of them also had cerebral palsy. Participation observation was used for data collection, therapeutic interventions were repeated twice and sign test was used for data evaluation. The massage of each child lasted approximately 15 minutes and the author performed it on children, especially on the upper and lower limbs and on the face. In her work, she also described in detail the course of the massages and the texts of the used poems, which were presented to children as part of a receptive poetotherapeutic intervention. The reactions of all children were positive. These reactions, however, did

not differ significantly, whether it was a “pure” massage without words or a massage supplemented by a rhythmic and verse poem.

Another bachelor thesis of the student V. Vykopalová related to therapeutic work with text in the clientele of children with specific educational needs. The author also tried to compare bibliotherapeutic and poetotherapeutic techniques and by means of a sign test she evaluated and compared the mood of children manifested in the chosen expression techniques. The author of the research concluded that the mood of children and hence the positive emotional experience during the poetotherapeutic and bibliotherapeutic interventions changed positively. However, was not possible to prove the existence of any significant differences in the use of bibliotherapeutic and, in contrast, poetotherapeutic techniques. This research was also limited by the minimum sample size of the monitored children (N = 8, 4 boys, 4 girls).

The thesis of Z. Halašková from 2016 had a different focus. The author tried to analyze and compare readers' preferences, mastery of Czech grammar and the extent of vocabulary of secondary school youth and also chose a clientele of students with specific learning and behavioral disorders. She compared the results with an intact group of high school students. In her investigation she used her own test material, which included the performance of various literary tasks (inventing words beginning with a certain letter, words beginning with the same prefix, words that differ only in the length of vowels, etc.). These tasks were complemented by a simple questionnaire, which focused primarily on identifying reading preferences. A total of 252 students of the Secondary Agricultural School underwent research, of which 34 were students diagnosed with specific learning difficulties. The analysis of the results of this relatively large sample (using the chi-square statistical test) showed the following data:

- High school students diagnosed with specific learning difficulties have significantly greater problems with grammar rules than their intact peers.
- High school students diagnosed with specific learning difficulties have approximately the same range of active vocabulary as their intact peers.
- High school students diagnosed with specific learning difficulties are approximately as well versed in their text as their intact peers.
- High school students have approximately the same reading preferences. Specific learning disabilities therefore do not affect the qualitative reading choice. It is influenced rather by the pupil's age, their mental maturity and interests (Halašková 2016).

More extensive research concerning the assessment of the relationship of literary creativity in the context of a sample of respondents of the detoxification unit was carried out by J. I. Vinkler in 2018 and the results of his investigation were presented

to the public in his thesis. He assessed the influence of individual poetotherapeutic techniques and assumed the existence of certain links between individual diagnoses and the quality of literary poetic creativity of clients treated for alcoholic and non-alcoholic addiction. He tried to demonstrate with this clientele the indirect link between the depth and degree of their psychological problems and the quality of their literary products.

Vinkler conducted his research in several stages and selected a sample of 11 patients (N = 11, 5 women, 6 men) aged 18 to 66 years. They were patients from different socioeconomic strata who had different professions and education. He obtained data using his own non-standardized JIV 18 test, which contained the following items:

- a) Thinking = Completing positively tuned sentences so as they rhyme
  - b) Recurrence = Adding negative sentences so as they rhyme
  - c) Semaphore = Adding “color-coded sentences” so as they rhyme
  - d) Limeric = Creating a limeric (a playful poem whose first verse repeats at the end)
  - e) Abstinence Decalogue = Reformulating the Decalogue so as it rhymes
  - f) Funnel = Creating a rhymed poem that fits into a scheme of precisely defined syllables
  - g) Neologism = Creation of any verse poem composed of nonsense and neologisms
- (Author’s note: Test items are given for reference only and in abbreviated form.)

The results of the research did not confirm the existence of an indirect link between the increase in the quality of literary poetic creativity and the degree of traumatization of the clients of the detoxification unit. However, the research indicated that the monitored clientele of persons with addictions needs to have clearly defined rules as a springboard for their own, independent work. This boundary proved to be a safe haven and created a platform of freer and thus better literary work for the vast majority of detoxification unit patients. Vinkler also found that when working with this clientele, it is not appropriate to use poetotherapeutic techniques that directly affect addictions, relapse, solitude and other unpleasant topics (Vinkler, 2018).

Another significant survey was conducted by Lenka Kubínová. She described it in more detail in her diploma thesis entitled “Poetry Possibilities in the Diagnosis of Specific Learning Disabilities”. It focused on comparison of vocabulary and perception of rhythm and rhythm of poems in pupils diagnosed with specific learning disabilities and intact pupils. She also created her own non-standardized test using poetotherapeutic material modified for diagnostic purposes.

The author set a total of two hypotheses that were verified in the research, ie in both cases the null hypothesis was rejected. Therefore, the results of the research showed that pupils with specific learning disabilities do not perceive rhythm and

rhyme the same way as pupils of the control group and also do not have the same developed vocabulary. The author also demonstrated the usefulness of using poetry to diagnose specific learning disabilities. A total of 136 children from the Hradec Králové Region of the Czech Republic and Prague were involved in the research, 32% of whom were diagnosed with some learning disabilities (Kubínová, 2019).

## 4 Ongoing actual research

Research is currently underway as part of the dissertation of J. I. Vinkler. His research, previously carried out on the detoxification unit, which is described in the previous chapter, is understood in this respect as its pre-research. In the current ongoing research described in the work *Poetotherapeutic intervention in the treatment of addiction*, the investigator is interested in the evaluation of literary creativity of clients who are treated for addictions depending on their length of stay in a detox facility. In particular, Vinkler set out to find a significant link between the length of time clients stay at the detox department and their literary creativity. This basic objective has been established on the basis of previous research and should complement already verified facts concerning therapeutic work with this clientele. In order to achieve this goal, the author uses the quality monitoring of individual selected factors, which in their entirety positively influence the quality of the literary formations. These factors include in particular poetic language, figurative speech, poetic content, rhythm, rhyme, stanza, syntax, image, symbol, comparison, metaphor and personification (Vinkler, 2018).

Vinkler assumes that he will analyze these monitored variables in terms of content and methodological triangulation and will focus this triangulation primarily on the results obtained through his own test, which will be a modification of the RES model (Mazza, 2017).

**RES model:** This interactive model uses a receptive/normative component that works with an existing poem. The model also includes the expressive/creative component in which the poems are created. In the third, symbolic/ceremonial, and last component of the model, the poems are read aloud before others. The use of existing poems is based primarily on the principle of choosing a poem that is close to the mood of clients. This principle reflects and mirrors the mood of the group and the specific topics that arise during treatment.

The author wants to use group poetry techniques at the end of each therapy session. It is a creation of a group poem, with each participant in the therapy having the opportunity to contribute to the creation of this poem. A group poem will be initiated through a predominant topic or collectively shared feeling in a group session. The poems will be scanned and later physically recorded and their paper copies distributed to all members of the group at the beginning of the next session.



This distribution of copies to the next scheduled therapy session will create the time needed for a better assessment and analysis of the created poetry.

## 5 Conclusion

From this overview of researches concerning poetotherapeutic and bibliotherapeutic interventions, several basic findings arise. At first glance, it is obvious that there is considerable variability in the direction of the described surveys, as well as the wide range of variations of the issues which are researched. For this reason, it is difficult to draw any more reliable, credible or even transferable conclusions which would relate to most of described surveys at least in some indicators. There are also low numbers of monitored population samples, which participated in most of the researches described above. Their characteristic is also very heterogenous, either concerning the stratification of diagnoses or chronological age of observed persons.

Nevertheless, the researches carefully suggest the importance of therapeutic work with literary formations, whether we are talking about poetry or prose, whether we are talking about active work or ,mere‘ passive reception. Aside from the rather questionable assessment and differentiation of therapeutic work and simple literary education at school. Most of the techniques of working with a literary text described here can be used in both – expressive-therapeutic techniques with proven standard education. It will be interesting to observe where the previous and similar researches will lead and whether they will succeed to prove and by using quantitative or qualitative approaches also verify the usefulness of the use of some of the monitored procedures and techniques for therapeutic practice itself. So far, this has not happened, but the first steps have been taken.

It is also gratifying that this unexplored field of literary creativity and analysis of the success and applicability of various poetotherapeutic and bibliotherapeutic techniques in clientele of children and adults with SNP is slowly getting into the attention of young adepts of pedagogical and therapeutic profession and specialization.

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## References

- [1] Flassigová, D. ( 2005). *Možnosti využití poezie v rámci biblioterapie u dětí* Zvš. Bakalářská práce, PdFUP Olomouc.
- [2] Froncová, P. (2008). *Muzikoterapeutické a poetoterapeutické techniky na ZŠ speciálních*. Bakalářská práce, PdFUP Olomouc.

- [3] Halašková, Z. (2016). *Biblioterapeutická intervence u žáků se SPUCH*. Diplomová práce, PdF UP Olomouc.
- [4] Kubínová, L. (2019). *Možnosti poezie v diagnostice specifických poruch učení*. Diplomová práce, PdFUP Olomouc.
- [5] Lawrence R. Alschuler. *The psychopolitics of liberation political consciousness from a Jungian perspective*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2006. ISBN 9780230603431.
- [6] Mazza, Nicholas. *Poetry therapy: theory and practice*. Second edition. New York: Routledge, Taylor & Francis Group, 2017. ISBN 978-1138812574.
- [7] Šotolová, M. (2011). *Využití poetoterapie v dotykové terapii u dětí s mentálním postižením*. Bakalářská práce, PdFUP Olomouc.
- [8] Švaříček, R., Šedová, K. et al. (2007). *Kvalitativní výzkum v pedagogických vědách*. 1. vyd. Praha: Portál, 2007. 377 s. ISBN 978-7367-313-0.
- [9] Vykopalová, V. (2011). *Terapeutická práce s textem u klientů dětí se specifickými potřebami*. Bakalářská práce, PdFUP Olomouc
- [10] VINKLER, J. I. (2018). *Možnosti poetoterapeutické intervence na psychiatrickém oddělení v rámci léčby závislostí*. Diplomová práce, PdFUP Olomouc.

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# Potential of music experiences for augmentative and alternative communication users and their effect on communication training: a scoping review protocol

(overview essay)

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**Abstract:** *Music-based experiences were found to be effective in supporting and promoting purposeful communication by non-speaking people who use benefit from augmentative and alternative communication (AAC). However, this area is fragmented into several disciplines (e.g. speech and language therapy, special education, music therapy, etc.) and the possibilities of music-making for AAC training have not been systematically reviewed. The aim of the planned scoping review is to analyze the types of experiences that use music-making as a form of AAC and overview their effects for different groups of AAC users. The scoping review will be conducted according to JBI methodology. We will search in databases (BMC, CINAHL, EMBASE, ERIC, MEDLINE, ProQuest Central, PsycINFO, Scopus, and Web of Science), and the sources of unpublished and gray literature (Central, Clinical Trials, Current Controlled Trials, Google Scholar, and Open Dissertations) including the reference lists of relevant texts, language, location or publication period will not be limited. Study selection and charting of data from relevant studies will be done independently by two reviewers. The findings of the scoping review may enable classification of different types of music experiences and their effects in the context of AAC training, and propose recommendations for a more intentional usage of those experiences by AAC users, professionals (e.g. music therapists or special teachers), families, and other non-professionals.*

**Keywords:** *alternative communication, AAC, music, experiences, AAC training, JBI, scoping review, protocol*

# 1 Introduction

The shared problem of different groups of augmentative and alternative communication (AAC) users is a difficulty with oral expressions caused by speech and/or language disorder, which in turn complicates shared meaning making in communication (Beukelman & Light, 2020). Consequences of limited oral expressions are that opinions, feelings and ideas appear as brief expressions or remain tacit. Thus, social and academic learning throughout the lifespan is hindered (Simmons-Mackie, King, & Beukelman, 2013). In the proposed scoping review, we will focus on how making music and expressions through music can compensate and support communicative expressions in multimodal ways. Multimodality is a central approach in the field of AAC.

Research has shown that music has effect on supporting and promoting communication for people who use AAC, especially in case of people limited to severe and profound levels of functioning (Elefant, 2010; Lee & Ferran, 2012; Thompson & Ferran, 2015). If these people have difficulty in communicating and responding, it is often difficult to determine their level of cognitive function, and people's expectations may be very low. But many practitioners know that if you can enable those people to express themselves by performing or creating music, it can become obvious that they understand far more than was apparent from just indicating 'yes' and 'no', if they can even do that. Furthermore, music may be essential also to other groups of AAC users, including individuals with high level of cognitive functions. AAC technology can make a big difference for many AAC users, to develop from not being able to say anything, to being able to make choices and express themselves, and connect with the world. People who only have the tiniest movements can connect to a computer using sensors, and operate a communication scanning system, or play music via specialist music software (Samuels, 2015; Skogdal, 2021). People who can't control body movement at all can use their eyes with an 'eye-gaze' tracking system – if they look at different items on a computer screen, they can play music! (van der Wel, 2018; Vamvakousis, year unknown) Similar technology as used to play music can be utilized to scan through communication symbols, words or sentences on a computer screen, which can be spoken aloud. By making small movements or looking via eye-gaze, a person can develop their communication skills. This is quite physically demanding, as well as requiring concentration to hold one's gaze on a symbol. Also, there is a need to keep track of 'where you are' in the communicated phrase. All this combines to make the process laborious for many beginners, and it can often be difficult for them to successfully communicate. If expending a lot of energy while learning without achieving results, it is hard to maintain motivation. But if someone has already used a similar system in a more intuitive way to play music and gained practice and confidence, these skills can then be far more easily transferred to communicating. Thus, playing music via technology can act as a 'way in' to communicating.

Music-based approaches include very heterogeneous groups of experiences that are done by both – professionals, e.g. music therapists, as well as non-professionals including families (Goldbart & Caton, 2010). Communication in musical context has many similarities with communication using AAC and communication goals are central for many music therapist clinicians (Gadberry & Sweeney, 2017). Other professionals, e.g. music teachers, also refer that music instructions influence communicative behaviors of AAC users (DeVito, 2006) and some authors present interdisciplinary perspectives on the musical communication (Meyer, Zentel, & Sansour, 2016). However, this area has not been systematically reviewed. Many practitioners could benefit from an overview of possible usage of music-making experiences and their effects in the context of AAC training.

Music experiences can be classified into improvisational, re-creative, compositional and music listening methods (Bruscia, 2014). All the methods have numerous variations and techniques that enable rehabilitation of pre-verbal, non-verbal or alternative communication (Howland, 2014). Heterogeneous terminology for concrete music-based procedures and techniques is used in literature, mainly in the music therapy field. According to transformational design model (TDM), some non-musical exercises within any area of speech and language treatment (including AAC) can be easily translated into the musical exercises (LaGasse, 2016).

We hypothesize that a gap in the literature exists between AAC studies against music intervention studies. We propose that music has a big potential for AAC training and future development of this field requires the research evidence to be reviewed in a systematic way. There is a need to identify effects of different types of music experience on AAC training in different groups of AAC users. Furthermore, this review could influence creating interdisciplinary relationships between music therapy / related professions and the area of AAC – those areas have not been closely connected until now, and the importance of music hasn't been sufficiently recognized by most AAC practitioners. The search in databases (Epistemonikos, Prospero, JBI, and Cochrane) didn't find any systematic or scoping review focused on music and AAC. Therefore, this protocol was planned and published prospectively with an intention to carry out a scoping review in the future. The scoping review will be conducted according to JBI methodology (Peters et al., 2020).

## 2 Methods

Review questions:

- What types of music experiences can be used for communication training in different groups of AAC users?
- What is the effect of music experiences in the context of communication training in different groups of AAC users?

## Eligibility criteria

**Participants:** Population for this scoping review will be different groups of AAC users or candidates for AAC that are limited in oral expression and would benefit from some form of AAC system. It is expected that the participants will have diagnoses such as autism spectrum disorder, intellectual disability, cerebral palsy, amyotrophic lateral sclerosis, stroke, etc. It is also expected that the participants will have different ability profile related to:

- Level of functioning, mainly level of communication development that can be identified by different assessment tools, e.g. Communication Matrix (Rowland & Fried-Oken 2010).
- Level of music-making experiences, e.g. music perception, musical aptitude, or music appreciation (Kupferstein, 2020; Kupferstein & Walsh, 2016).

We will exclude studies with participants with functional verbal communication who are presumed not to have any benefit from AAC training. No further limitation by age, gender, or comorbidities will be applied.

**Concept:** We will include approaches using music experience as it relates to AAC training and use. Any type of music experience focused on verbal communication and/or development of ordinary speech, as well as music experiences for artistic and other purposes will be excluded.

**Context:** Training of AAC. We suppose that most of the studies will not explicitly mention that the music was applied in the context of AAC training. In those cases, we will consider the relevance of the outcomes gained by music experience from the perspective of AAC training.

**Type of sources:** This review will consider any quantitative or qualitative primary studies, as well as systematic reviews of any type. Experimental and quasi-experimental study designs, including randomized and non-randomized controlled trials, before-and-after studies and interrupted time-series studies will be included. In addition, analytical observational studies (including prospective and retrospective cohort studies, case-control studies, analytical cross-sectional studies) and descriptive observational studies (including case reports and descriptive cross-sectional studies) will be considered for inclusion. Qualitative studies will also be considered including, but not limited to, designs such as phenomenological, grounded theory, ethnography, qualitative description, action research, and feminist research studies. Bachelor theses, text and opinion papers and all types of non-systematic reviews will be excluded.

## Search strategy

The search strategy will consist of three stages and will target the retrieval of both published and unpublished articles from electronic searches, manual searches of

reference lists, and hand searches of key journals, where required. An initial limited search was performed in March 2021 in EBSCO host (accessed by the Palacky University e-sources), Scopus and ProQuest Central. The text words contained in the titles and summaries of the relevant articles and the index terms to describe the articles were used to create a complete search strategy for identifying relevant articles. The search strategy, including all identified keywords and index terms, will be adjusted for each included source. Reference lists of all relevant studies will be screened for additional studies. The publication period will not be limited.

The databases to be searched include BMC (Medvik), CINAHL Plus, EMBASE, ERIC, MEDLINE (OvidSP), ProQuest Central, PsycINFO, Scopus, and Web of Science. Sources of unpublished studies and gray literature to be searched include Central, Clinical Trials, Current Controlled Trials, Google Scholar, and Open Dissertations.

**Table 1:** *Key words and their synonyms for main components*

Main components	Key words and synonyms
Participants	Not applicable
Intervention	Music therapy OR music therapist OR music intervention OR music education OR music instruction OR music experience
Outcome	Intentional communication OR targeted communication OR non-verbal communication OR communicative behavior OR alternative communication OR communication act

## Study selection

Following the completion of the search, and to conform to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, the extension for scoping reviews (Tricco et al., 2018), a full set of results will be exported into Zotero V5.0.85. After the removal of duplicates, articles will then be selected in a two-step process by two reviewers (NČ, JK) working independently at each step.

Step 1 – screening of all the titles and abstracts returned for potential relevance: Each reviewer will assess the article against the eligibility criteria, and compare the proposed abstracts for full-text review.

Step 2 – screening of full-texts of articles with potential relevance will be undertaken for each abstract selected. The full version of the article will be retrieved and imported into Zotero-5.0.85. Two reviewers (NČ, JK) will independently undertake full-text analyses. Reasons for exclusion of full-text articles will be noted, and reported in a PRISMA flowchart, and provided as an appendix in the full review. Upon disagreement at any stage, the final agreement will be sought by discussion or by mutual consensus with input from a third reviewer.

**Table 2:** *Data charting tool developed by the authors*

Author, year, title
Study design/levels of JBI
Country/setting, language
Population (number of participants, diagnosis, functional classification and level of severity, age, gender, comorbidities, ability profile related to music...)
Experimental procedure(s) (description of control, length and frequency of music-based activity, presence of non-musical interventions, etc.)
Data collection method (self-report, tests, first-hand narrative, observational, researcher's reflections, etc.)
Type and context of music experience (active music-making / listening experience, instruments, strategies/techniques, the presence and role of AAC technologies, etc.)
Effects of the music experience (iatrogenic effect, positive experience, risk, or harm)
Sponsorship/affiliation, declared conflict of interest

### 3 Data charting and presentation

Data will be charted from papers included using an author-developed data charting tool (Table 2). We expect to find different types of studies, from different countries and settings. The quantitative study design will be classified according to JBI levels of evidence in quantitative research (Klugar, 2015) and the type of paradigm will be identified in qualitative studies (e.g. phenomenological, ethnographic, critical, etc.). We are interested in different characteristics of participants, not limited to their diagnosis, deficits, and levels of functioning. The data on musical as well as other abilities and skills will be charted whenever possible. Different characteristics concerning research experiments (e.g. description of control, presence of non-musical interventions, or methods of data collection) will enable to consider the methodological heterogeneity of studies. The data on the type and context of music experience is essential for classification of music-making methods / techniques and to suggest recommendations concerning intentional usage of musical experiences in AAC training. Data describing the effect of music experiences will show the potential of music towards the AAC training, including possible risks or harms. Finally, we will chart the data concerning the sponsorship and declared conflicts because there exist controversial discussions among AAC practitioners (ASHA, 2018; United for Communication Choice, 2018) and there may be potential biases in the studies. Data will be charted by two reviewers (NČ, JK). Any disagreements that arise between the reviewers will be resolved through discussion. The charted data will be presented in a tabular form and as a narrative summary that aligns with the objectives of the review. Any deviation from this protocol will be clearly detailed and justified.



## The team's roles and a scoping review plan

The findings will be discussed by an international multi-field team of professionals. After the preparation of all the above steps, the team will hold discussions as needed to review and synthesize the evidence, and draw conclusions. The team consists of experts from the area of AAC, inclusive and special education, psychology, music therapy, music education, medicine, and methodology.

JK will be responsible for the management of the project, overseeing and taking part in the search, screening, charting, and discussions. All members will discuss regularly, and, specifically, will be involved in making the final decision for inclusion/exclusion of texts, reviewing of charted data, drawing conclusions, and revising the draft of the manuscript. All authors will contribute to the development of the draft manuscript, and before submission, will be asked to approve of the final text. The scoping review outline is also shown in Table 3.

**Table 3:** *Scoping review plan*

Search	Professional information specialists
Abstract screening	JK, NČ
Full-text screening	JK, NČ (texts for inclusion approved by all members)
Bibliography hand search	All members
Data charting	JK, NČ
Data reviewing and discussions	All members
Writing of the first draft, discussions, development of the final manuscript for submission	All members

## Expected results, publication, and dissemination

The expected results of this scoping review may enable the development of a classification of different types of music experiences in the context of AAC, and provide an overview of the possible effects of music experience on communication training in different groups of AAC users. Based on the findings, it may be possible to achieve a better understanding of the relevance of music for AAC users, and to discuss the many possibilities for how to use music experiences by AAC users, the professionals (e.g. music therapists or special teachers) and non-professionals. Above all, we will compare the findings of professionals who utilize music experiences, the description of these experiences by AAC users themselves, and the reported data provided by families of AAC users and other non-professionals.

The results of the scoping review will be published in a scholarly journal, and disseminated among the AAC stakeholders (professionals, users, and interested non-professionals), members of music-related communities, and in related conferences.

## Ethical aspects / Conflict of interest

No financial conflicts of interest declared but there may be a potential “intellectual conflict of interests” as JK is a director of Palacky University Center of Evidence-based Education & Arts Therapies.

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## References

- [1] American Speech-Language-Hearing Association (ASHA) (2018). American Speech-Language-Hearing Association (2018). *Rapid Prompting Method*. Retrieved Feb 25, 2021. <https://www.asha.org/policy/ps2018-00351/>.
- [2] Beukelman & Light (2020). *Augmentative & Alternative Communication: Supporting Children and Adults with Complex Communication Needs*. Paul H. Brookes Publishing Company, Incorporated.
- [3] Bruscia, K. E. (2014). *Defining music therapy* (2nd ed.). Barcelona Publisher.
- [4] Elefant, C. (2010). Unmasking hidden resources: Communication in children with severe developmental disabilities in music therapy. In V. Karkou (Ed.), *Arts therapies in schools: Research and practice* (pp. 243–258). Jessica Kingsley Publishers.
- [5] Devito, D., R. (2006). *The communicative function of behavioral responses to music by public school students with autism spectrum disorder*. (Dissertation). University of Florida.
- [6] Gadberry, A. L., & Sweeney, A. (2017). An explorative study examining augmentative and alternative communication training in the field of music therapy. *Journal of Music Therapy*, 54(2), 228–250. <https://doi.org/10.1093/jmt/thx004>.
- [7] Goldbart, J., & Caton, S. (2010). *Communication and people with the most complex needs: What works and why this is essential (July 2010)*. Research Institute for Health and Social Change Manchester Metropolitan University (MMU). [https://e-space.mmu.ac.uk/198309/1/Mencap%20Comms\\_guide\\_dec\\_10.pdf](https://e-space.mmu.ac.uk/198309/1/Mencap%20Comms_guide_dec_10.pdf).
- [8] Howland, K. M. (2014). Developmental Speech and Language disorders. In R., H., Michelle (Ed.). *Guidelines for music therapy practice in developmental health* (pp. 108–138). Barcelona Publishers.
- [9] Klugar, M. (2015). *Systematická review ve zdravotnictví*. Vydavatelství Univerzity Palackého.
- [10] Kupferstein, H. (2020). *Able Grounded Phenomenology (AGP): Toward an Ethical and Humane Model for Non-Autistic Researchers Conducting Autism Research*. (Doctoral dissertation). Saybrook University.
- [11] Kupferstein, H., & Walsh, B. J. (2016). Non-verbal paradigm for assessing individuals for absolute pitch. *World Futures*, 72(7–8), 390–405. <https://doi.org/10.1080/02604027.2014.989780>.
- [12] LaGasse, B. (2016). Developmental Speech and Language Training Through Music. In M. H. Thaut & Hoemberg, V. *Handbook of Neurologic music therapy* (pp. 196–216). Oxford University Press.

- [13] Lee, J., & McFerran, K. (2012). The improvement of non-verbal communication skills of five females with profound and multiple disabilities using song-choices in music therapy. *Voices: A World Forum for Music Therapy*, 12(3), unpagged. <https://doi.org/10.15845/voices.v12i3.644>.
- [14] Meyer, H., Zentel, P., & Sansour, T. (2016). *Musik und schwere Behinderung*. Loeper Karlsruhe.
- [15] Wel, van der (2018). My Breath My Music Foundation. *Making music with switches* (n.d.). Retrieved Feb 25, 2021. <https://mybreathmymusic.com/en/schakelaars>.
- [16] Peters, M. D. J., Godfrey, C., McInerney, P., Munn, Z., Tricco, A. C., Khalil, H. (2020 version). Chapter 11: Scoping Reviews. In E., Aromataris, E. & Munn, Z. (Eds.). *JBI Manual for Evidence Synthesis*, JBI. <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-12>.
- [17] Rowland, C., & Fried-Oken, M. (2010). Communication matrix: A clinical and research assessment tool targeting children with severe communication disorders. *Journal of Pediatric Rehabilitation Medicine*, 3(4), 319–329. <https://doi.org/10.3233/prm-2010-0144>.
- [18] Samuels, K. (2015). The meanings in making: Openness, technology and inclusive music practices for people with disabilities. *Leonardo Music Journal*, 25, 25–29. [https://doi.org/10.1162/lmj\\_a\\_00929](https://doi.org/10.1162/lmj_a_00929).
- [19] Skogdal, E. (2021). *Sing with your eyes! Hode, skulder, kne og tå*. Retrieved March 28, 2021. <https://youtu.be/-u-Sb5Z5s9o>.
- [20] United for Communication Choice (2018). *Compilation of Letters sent to ASHA*. Retrieved March 13, 2021. <https://unitedforcommunicationchoice.org/wp-content/uploads/2018/08/Compilation-of-Letters-to-ASHA-Website-090618.pdf>.
- [21] Simmons-Mackie, King, & Beukelman (2013). Simmons-Mackie, N., J. M. King, and D. R. Beukelman, *Supporting communication for adults with acute and chronic aphasia*. Baltimore: Paul H Brookes Pub Co.
- [22] Vamvakousis, V. (year unknown). *Temporal control in the eye harp gaze-controlled musical interface* (n.d.). Academia.edu. Share research. Retrieved March 12, 2021. [https://www.academia.edu/5698239/Temporal\\_Control\\_In\\_the\\_Eye\\_Harp\\_Gaze\\_Controlled\\_Musical\\_Interface](https://www.academia.edu/5698239/Temporal_Control_In_the_Eye_Harp_Gaze_Controlled_Musical_Interface).
- [23] Thompson, G. A., & McFerran, K. (2015). Music therapy with young people who have profound intellectual and developmental disability: Four case studies exploring communication and engagement within musical interactions. *Journal of Intellectual & Developmental Disability*, 40(1), 1–11. <https://doi.org/10.3109/13668250.2014.965668>.
- [24] Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garrity, C., Straus, S. E. et al. (2018). PRISMA extension for scoping reviews (PRISMA-scr): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467. <https://doi.org/10.7326/m18-0850>.

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# Improving functional vision through training based on principles of behaviour analysis

(overview essay)

Martin Vrubel, Karel Pančocha, Nicol Dostálová

**Abstract:** *This interdisciplinary article brings together teaching methodology based on applied behaviour analysis on one hand and the training of visual functions as used in special education on the other. It introduces the reader to issues of vision enhancement based on behavioural optometry and describes visual functions improvable by training. It also cautions against misconceptions and false promises as made by some providers of therapeutic services. The authors discuss in detail visual acuity exercises, eye movements and the evaluation of visual perception. Further, they address conditions and principles of behavioural training of visual functions and present practical examples of selected training procedures.*

**Keywords:** *behavioural optometry, applied behaviour analysis, ABC model, visual training, teaching, accommodation, convergence, fusion, vision*

## 1 Introduction

Social networks and various websites have recently become sources of misleading information, recommendations and instructions on how vision can be improved with exercise. An article published in 2020 under the title 'Eyes: Vision enhancement by exercise and modification of diet' states that people with visual impairment or blindness can attend courses where they will learn exercise procedures that produce a 'guaranteed' result. Further, this article claims that these courses get no mention in professional literature through efforts on the part of the health-sector lobby supported by manufacturers of eyeglasses aimed at preventing an outflow of customers (see 'Lepší oči' [Better Eyes], 2016; 'Děrované brýle – přirozené zlepšení zraku' [Pin-hole glasses – for natural improvement of sight], 2017). So what is the reality? Most such articles draw from unsubstantiated or provably false information. Their purpose

is to extract money from the general public. In some cases, an author targets a group of people with serious visual impairment, promising to arrest deterioration or even a miraculous cure.

The procedures of behavioural optometry are based on scientific evidence. Behavioural optometry is a special optometric approach that uses elements of applied behaviour analysis in development in the USA since the 1920s. A. M. Skeffington, one of the founders of behavioural optometry, described basic areas of work leading to enhancement of the visual system as a whole. Behavioural optometry does not promise miracles. Its findings are applicable in the development of abilities connected with particular anatomical structures of the eye, so leading to enhancement of visual functions. The workings of behavioural optometry are based on a predetermined system of examination comprising tailor-made exercises and systematic evaluation of results.

## **2 Principles of behavioural training**

A behavioural optometrist considers some, if not most, visual functions and abilities connected with vision learned behaviours. As many of these behaviours are learned in very early childhood, we have no memory of our own learning in vision. This explains why this way of thinking about vision may seem strange to us at first.

Exceptions to this are parts of the process of visual perception associated with reflex actions, such as narrowing or widening the pupils in reaction to changes in light intensity, or blinking when a gust of wind brushes the face or a speck of dust gets in the eye. These are not learned processes: they arise out of genetic predispositions and reflexive (i.e. independent of the will) actions by a living organism.

If we accept the thesis that vision is largely a learned behaviour, it is possible to apply general principles of learning not only for the enhancement of existing skills but also for correction of badly learned skills of vision and/or relearning of skills lost or diminished (due to accident or disability, for instance).

For the learning or training of visual functions, we can draw on basic principles of learning based on theories of behaviour as described by applied behaviour analysis, a scientific discipline concerned with understanding human behaviour so as to change it for the better (Cooper, Heron, Heward, 2007).

### **2.1 Vision and the ABC model**

Behavioural optometry takes vision as a set of skills in the individual comprising behaviours that include the following: coordination of the extraocular muscles and the eyelid muscles, accommodation, ability to focus attention on a particular object or part of that object and maintaining this attention for a given time, ability to shift attention to a different object in the field of view.

The ABC model allows us to perceive every behaviour (B = behaviour), including vision in the context of and in connection with whatever immediately precedes that behaviour (A = antecedent) and whatever immediately follows it (C = consequence). When devising exercises informed by the behavioural optometry approach, we concentrate on the influence of/on antecedents and consequences of behaviour. The situations described in Table 1 below give examples of this. Whereas antecedents determine whether a given behaviour will arise or not, consequences affect whether in future such a behaviour will be more or less frequent or perhaps cease altogether. Although the consequence of a behaviour (C) cannot affect the behavioural act, for this has already occurred, it will affect the probability with which this or a similar behaviour will occur in future.

**Table 1:** *ABC examples*

Antecedent (A)	Behaviour (B)	Consequence (C)	Influence on future behaviour
Orthoptist's instruction to focus attention on a moving object	Focusing attention on and watching the object for a period of 10 seconds	Praise for successful completion of the task	Increase in frequency of focusing of attention
A powerful source of light coming from the right	Movement of the eyes to the right and focusing of attention on the source of light	Discomfort caused by glare	Decrease in frequency of looking directly at a powerful source of light
Presence of a book by a favourite author	Opening of the book and reading a chapter	Positive emotion and good feeling derived from the reading	More frequent reading books by this author in future

## ANTECEDENTS (A)

We can perceive antecedents as stimuli or situations that come before the target behaviour in time (e.g. they occur immediately before performance of a visual act). The three basic groups of antecedents comprise (a) discriminative stimuli (SD), (b) motivating operations (MO), and (c) prompts. If we wish for a certain behaviour to manifest itself in an individual, these antecedents must act in the given environment at the given moment in the right degree. This applies to behaviours associated with exercises of behavioural optometry as to other behaviours. For this reason, a trained therapist – e.g. an optometrist, a low vision therapist, or a special educator – must ensure their proportionate impact at the right time. The management of discriminative stimuli, motivating operations and prompts is one of the so-called antecedent strategies, which should form part of every skills training exercise in behavioural optometry. Let us now look at the different antecedent types.

Discriminative stimuli (SD) signal to us whether or not a behaviour will be reinforced; in other words, whether it serves its function, so giving us what we expect

from it. The presence of SD signals the availability of reinforcement, so increasing the probability that a certain behaviour will occur in the individual. The absence of SD signals the unlikelihood of the behaviour leading to success (it will not be reinforced). Examples of a discriminative stimulus are the presence of a particular person (e.g. an optometrist or a low vision therapist) with whom the exercise is typically performed, and the instruction and/or challenge to perform the exercise.

Motivating operations (MO), also referred to as motivations, temporarily raise or reduce the value of reinforcement for performance of a target behaviour. MO is heavily dependent on satiation on the one hand and deprivation on the other. If, for instance, a person has gone for some time without imbibing liquid, he/she is subject to deprivation that manifests itself in thirst; the MO for liquids increases, as does the occurrence of behaviour leading to the quenching of the thirst. A therapist performing a behavioural optometrist's intervention can influence (in this case, raise) MO in his/her client by reinforcing (rewarding) the good performance of an exercise with an activity or a thing that is of high value but not readily available to the client. These activities and things are highly individualized, so they must be adapted to each individual and set of circumstances, for purposes either of satiation or deprivation. For some, positive feedback from a low vision specialist is of great value; others (not least small children) will appreciate the picture they are given at the end of an exercise. If the intervention serves to affect (i.e. increase) the client's motivation, it is likely that his/her behaviour as associated with a particular exercise will occur with greater frequency and/or be of longer duration.

Prompts are special stimuli that help the individual perform certain behaviours he/she would not otherwise achieve. Prompts take different shapes and forms: a prompt can be physical assistance to initiate the performance of a certain exercise, the guiding of the client using verbal instructions, or the indicating of the direction in which the client should follow a moving object.

## **BEHAVIOUR (B)**

A behaviour is any activity in an organism that is observable, measurable and repeatable. From the perspective of behavioural science, a behaviour is also an activity observable only by the individual concerned – in the form of thought, imagination etc. As mentioned above, learned behaviours can include a whole range of activities associated with vision. In order to change such a behaviour, learn new skills and/or eliminate ineffectual habits connected with vision use, it must first be defined in a way that can be observed and measured. Only thus will it then be possible to determine whether the intended change has occurred through the training of new vision-related skills. Such a description is referred to as the behavioural definition of behaviour. If, for instance, an exercise is performed for the improvement of binocular vision, it will be necessary to come up with a definition of the behaviour the individual should



achieve. This may consist in a description of the activity the individual will manage plus its circumstances, duration and result.

After the target behaviour has been thus defined, it must be properly recorded, and the records must be evaluated. Measurable behavioural characteristics include: frequency, i.e. the number of occurrences of a behaviour within a given time; the duration of the behaviour; elapsed time between the request and the start of the behaviour (known as latency); and intensity, i.e. the percentage of correct responses over a given period of time. Without records of behaviour, the initial state of a client's skills is impossible to determine, with the consequence that it is impossible to monitor the efficacy or lack thereof of the intervention. A basic rule of behavioural interventions (ergo interventions of behavioural optometry) is the making a decision on whether to continue and/or adjust the programme of intervention on the basis of measured data on behaviour. If the intervention does not have the intended effect on the target behaviour, the making necessary changes to the programme of intervention may be necessary to ensure positive results.

## **CONSEQUENCES (C)**

For changes in behaviour including the learning of new vision-related skills, what comes immediately after the behavioural act (activity, exercise, etc.) is of the greatest influence. From the point of view of behavioural analysis, there exist five basic consequences of behaviour: positive reinforcement, negative reinforcement, positive punishment, negative punishment, and extinction. These five are not equally suitable for application in behavioural optometry. It is necessary to bear in mind that the terms 'positive' and 'negative' here do not mean 'good' and 'bad' respectively; they indicate whether a stimulus has been added to or alternatively removed from the environment. In the context of behavioural science, the meaning of the term 'punishment' does not correspond with that in common use.

### **Positive reinforcement**

In the application of programmes of intervention in behavioural optometry, the principle of positive reinforcement should be used as often as possible. As a consequence of the client's behaviour, it increases the probability of future occurrence of a given behaviour. As for the positive nature of the reinforcement, a stimulus is added to the environment immediately after the client demonstrates the right behaviour. It is important to bear in mind that reinforcement can be considered such only if it results in higher probability of future occurrence of the target behaviour. Reinforcement can be considered anything that serves to reinforce. Social reinforcement typically takes the form of positive feedback or praise. It may also take the form of a sound signal to announce the successful completion of the exercise to the client. With children, this reinforcement may take the material form of a small reward (an edible sweet, for

instance) or a favourite activity. Reinforcement of a behaviour is highly individual. For this reason, a so-called preference assessment should be performed at the outset to establish which stimuli will serve as reinforcers in the individual in question.

### **Negative reinforcement**

As with positive reinforcement, the consequence of negative reinforcement is an increase in the future occurrence of a target behaviour. Here, the word 'negative' means that a stimulus disappears from the environment after the individual demonstrates the target behaviour. Let us imagine a situation in accommodation training in which an aversive stimulus (an unpleasant noise, for instance) disappears as soon as the individual focuses attention on a given object. This principle is used in road safety; the aversive noise signals that the driver has not fastened his/her seatbelt, and it discontinues as soon as the driver fastens the belt. This principle has limited applicability in behavioural optometry.

### **Positive punishment**

From the perspective of behavioural analysis, punishers are stimuli that follow an act of behaviour and reduce the probability of future occurrence of this behaviour in similar situations. Positive punishment contributes a new stimulus to the individual's environment. Let us imagine a pupil who has received a written reprimand for creating a disturbance in class. Although this punishment may serve to stop socially inappropriate behaviour, it has no impact on the forming of new behaviours or skills. The use of punishers is appropriate where the aim is to stop behaviour that may be dangerous for the client or his/her surroundings. Nevertheless, research has shown that the application of a punishment delivers a range of undesirable consequences. For this reason, punishment has limited applicability in behavioural optometry.

### **Negative punishment**

Positive and negative punishment can arrest undesirable behaviour. With negative punishment, however, a stimulus from the environment will be diminished after the behaviour. Let us take the example of a child who has made a big mess in his/her room and so has been forbidden to play computer games that evening. The behaviour has resulted in the removal of a stimulus from the child's environment – in this case, provided by a tablet. Like positive punishment, negative punishment has very limited applicability in optometric intervention work with clients.

### **Extinction**

The final possible consequence of a behaviour is extinction. This concerns the cessation of reinforcement in previously reinforced behaviour, so that the behaviour in question no longer yields what it once did. One might say that the behaviour is

no longer followed by a stimulus. This consequence leads to a gradual reduction in the incidence of the behaviour until the behaviour disappears entirely from the individual's repertoire. It is important to bear in mind that extinction is not in itself a way of learning a new skill. That skill must be built up gradually by use of principles of reinforcement. Extinction may be accompanied by a phenomenon known as an extinction burst. The behaviour in question may increase in frequency, intensity and/or variability for some time before it begins to decrease. Procedures based on extinction may be used in behavioural optometry where the aim is to eliminate inappropriate or non-functioning behaviour connected with vision. Such behaviour may result from various pathological conditions associated with visual self-stimulation. If we remove from the environment consequences that sustain the behaviour, the behaviour will lose its functionality and gradually become extinct.

When putting together a programme of intervention in behavioural optometry for an individual client, it is necessary to consider all parts of the ABC chain to ensure that (a) it contains a detailed description of target skills and behaviours to be practised and learned, antecedents that help in the setting of conditions to make it possible and, ideally, simple for the client to master the behaviour or skill, and (b) it exploits consequences for the influencing of the client's behaviour in accordance with the plan.

### **Visual functions suitable for development through exercise**

Only the visual functions realized by the trainable anatomical structure of the eye can be exercised and improved. These functions include fusion, point and movement fixation and cooperation of the eyes for near vision, i.e. convergence, which is dependent on the functioning of the extraocular muscles for focusing on close objects; accommodation, which is related to the ability of the eye muscles to change the radius of the curvature of the lens; and eye-hand coordination. Visual impairments related to poor visual acuity, defects of vision caused by diseases of the retina and blindness cannot be influenced by exercise. Let us now look in more detail at functions improvable by behavioural therapy training.

### **Accommodation**

Accommodation is the ability of the eye to refocus at different distances, i.e. to see clearly at distance and at close range. The ability to focus is determined by a field of vision defined by the closest and furthest points on which the eye can focus, respectively. In the course of a human life, owing to physiological change in the lens the closest point moves further away, making close-range focusing more difficult. Close-range focusing is achieved by means of a circular muscle that moves the lens, so changing its shape. The lens is connected to this muscle by a suspended device. The circular muscle has transverse striation, making it possible to train and so improve

the period of accommodation of near-vision focus. Application of this training is limited by the natural disruption to lens elasticity that tends to occur between 60 and 70 years of age. By this time, the lens is so hard that the circular muscle is no longer able to change shape and so focus at close range, resulting in the wearing of reading glasses (Hromádková, 1995).

### **Convergence**

Close-range vision is also affected by convergence, one of the so-called vergence movements, by which the extraocular muscles move the eyes so that the image of the object of observation reaches the place on the retina where vision is sharpest. For near vision, both eyes move towards the nose, a movement known as convergence. The outward movement of the eyes away from each other is known as divergence. So that convergence is achieved for the subject to read and perform other close work easily, it is necessary for the extraocular muscles – as well as the accommodation apparatus – to be in good working order. The non-achievement of good convergence is manifested in the subject as increased fatigue, inattention, even double vision; in such a situation, it is necessary to train the (transversely striated) extraocular muscles (Hromádková, 1995).

### **Fusion**

Fusion is the ability to combine visual information from both eyes in a single perception. In near vision, good fusion is highly dependent on convergence. If convergence is defective, fusion cannot be maintained, resulting in double vision. Fusion is also dependent on good alignment of the eyes. If, for instance, the subject has a strabismus (abnormal alignment of the eyes), there is no question of good fusion. Fusion can be trained and improved.

### **Strengthening functions of the visual centre**

This can be achieved by special exercises for developing eye-hand and eye-foot coordination, which is manifested in faster assessment of visual phenomena by the centres of the brain and consequent reaction of the hand or foot.

### **Main aims of behavioural optometry**

The principal aim of behavioural optometry is for the subject to achieve good coordination of the eyes during eye movements and fixation, good accommodation function, functioning eye-hand coordination, visual and integrated imaginativeness, prevention of visual stress and/or development of computer vision syndrome, and well developed sensory-motor coupling. The goal is to improve low-performance binocular vision to the point of optimization, to improve accommodation ability, and to detect and address various other symptoms that impair the performance of the eyes.

Completion of such training reduces the incidence of asthenopic difficulties in the client, which include headaches, problems with concentration, blurred vision, unstable text when reading, and apparent spots before the eyes. The training also reduces difficulties with refocusing for distance and difficulties with eye movements.

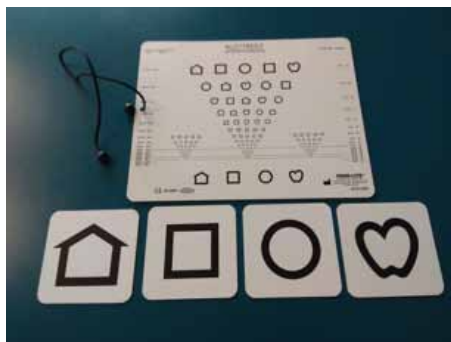
Behavioural optometry is not intended only for clients with visual impairments, however. The client is maybe someone who wishes to improve their visual functions. Such a client may be an athlete, e.g. a goalkeeper for whom a greater field of view means higher sporting achievement, or a gamekeeper, whose ability to keep the eyes in focus for longer makes performance of his occupation easier.

For successful application of behavioural therapy training, a test of visual functions must be performed before commencement of the intervention. This assesses visual acuity in each eye separately and both eyes together, the mobility of the extraocular muscles, convergence capability, and nerve function. In the course of behavioural therapy training the client obtains a lot of information about the quality of his/her vision and many recommendations for exercises for performance alone and/or using special aids (Vymyslický, 2007).

### **Behavioural vision exercises: procedure**

The **first step** is a basic diagnosis of visual functions (visual acuity, visual field, eye movements). This is to determine the current state of the visual system and the client's subjective and objective difficulties, and to assess options available to the client.

A *visual acuity diagnosis* is performed using optotype wall charts with letters, pictures and LEA symbols.



**Figure 1: LEA Symbols**

*Visual field* can be assessed by confrontation test. A confrontation test consists in the examiner sitting opposite the examinee. When the examinee's right eye is being tested, the left is closed while he/she looks directly at the examiner's open left eye (the examiner's right eye is closed). As the examiner moves a target object outwards,

inwards, up and down, the examinee should report where in the visual field he/she sees the object and when it disappears from view. If the examinee reports seeing the object at the same time as it is seen by the examiner, the examinee's visual field is judged to be in good order, as the visual fields are in confrontation.

An *eye movement diagnosis* is performed next. The examinee looks at the target object with both eyes as the examiner moves it inwards and outwards and in various directions, all the while observing the examinee's eye movements. The diagnosis can be supplemented with a cover test, in which each eye is covered in turn with a fogged covering aid; the examiner checks whether the eye that cannot see the target object at a given moment is stable, and, if not, how it deviates.

A suitable training programme for the improvement of the client's visual functions and a period of time in which this will be carried out are determined on the basis of this diagnosis. The client is motivated to complete the programme successfully. Finally, suitable practice aids are selected (Vymyslický, 2007).

The **second step** concentrates on correction of established errors of vision and training of good eye movement. Principles of behaviour analysis are applied for the correction of errors. Errors of eye movement result in difficulties with eye-hand coordination, disorientation when reading, including skipping lines, difficulties when copying text, and reduction of work-related performance and efficiency (Hosek, 1997).

The **third step** concerns accommodation diagnosis and training and convergence training. The diagnostic and exercise tool is shown in Figure 2. For diagnosis, the examinee looks through a flipper whose upper and lower halves are of different optical powers. The aim is first to focus through the upper half, then to look through the lower half and focus. Healthy eyes can manage 15 such changes per minute. If fewer than 15 changes are managed, accommodation training is needed (Vymyslický, 2011).



**Figure 2:** Tool for accommodation diagnosis

Work is concentrated on developing the ability of near-vision convergence for the long term. Further, it is concentrated on diagnosis of positive relative accommodation, flexibility of accommodation, width of accommodation, speed of accommodation and accommodation endurance. If any of the above parameters do not achieve the required functional quality, the entire visual system will experience difficulties. These manifest themselves in problems when reading, reduced perseverance when reading, and problematic switching between near and distance vision. Problems also occur with changes of viewing distance (e.g. when driving a car) (Vymyslický, 2008<sub>a</sub>), (Vymyslický, 2008<sub>b</sub>).

The **fourth and final step** is diagnosis of the quality of the visual system, using tests of visual-spatial ability (recognition of spatial orientation of an object), visual motor integration (eye-hand coordination), ability to analyse (visual memory) and visual-auditory integration (Vymyslický, 2008<sub>c</sub>). This step uses a special aid called a Brock string.



Figure 3: Brock string

### Activities in the exercise programme

The programme is so composed that each eye is trained separately; for instance, fixation, eye-hand coordination, reaction time etc. is trained in first one eye, then both eyes together. Performance of these exercises should be based on principles of behavioural therapy. The average daily training programme comprises a number of pre-planned activities of approximately 15 minutes' total duration. The aim is to achieve improvement of individual visual functions through exercises tailored to the needs of a particular person (Vymyslický, 2007<sub>a</sub>).

### ***Sample exercise 1: Eye movement / thumb tracking***

The aim of this exercise is improvement of eye movement, accommodation and convergence.

Procedure: The client will watch his/her thumb – in horizontal, vertical and diagonal position, then at distance and at close range.

Step by step

1. The principle informing the exercise and the benefits to ensue from it are explained to the client.
2. The client performs the first round of the exercise; the instructor corrects errors.
3. The exercise proper is performed, first monocularly (right, then left eye), then binocularly, for 1 minute in each case.
4. After performance of the exercise, the client is praised.

### ***Sample exercise 2: Simulation of accommodation***

The aim of this exercise is practice of smooth, gradual and calm accommodation and convergence.

Procedure: The nearest point of observation is 30 cm from the subject, the most distant 2 m. The object of observation is moved closer and further away slowly and continuously. Alternatively, the client walks towards and away from a point on a wall.

Step by step

1. The principle informing the exercise and the benefits to ensue from it are explained to the client.
2. The client performs the first round of the exercise; the instructor ensures that the client fixates correctly on the distant point.
3. The exercise is performed by each eye separately, for 2 minutes in each case.
4. After performance of the exercise, the client is praised.

### ***Sample exercise 3: Body position in space***

The aim of this exercise is improvement of spatial orientation through the training of spatial vision.

Procedure: The client throws wooden skewers into a plastic tube. The client's task is to hit the target in all axes.



### Step by step

1. The principle informing the exercise and the benefits to ensue from it are explained to the client.
2. The client performs the first round of the exercise; the instructor pays attention to how the client approaches the throwing of the skewers and whether he/she makes the maximum effort.
3. The exercise is performed. The client looks with both eyes simultaneously. The exercise lasts 3 minutes.
4. After performance of the exercise, the client is praised.

## 3 Conclusion

The training of visual functions within the framework of behavioural optometry is a demanding, long-term process. Performed correctly, however, it will glean positive results (Nováková, 2007). It is necessary to approach this training as a comprehensive methodology comprising demanding initial diagnostics, regular training that applies principles of behavioural analysis, and regular evaluation of progress and consistency in the client's performance. People who have undergone behavioural training of visual functions testify that it has improved their reading, writing, and performance of homework and schoolwork in general. They also state that they can now apply greater concentration to work and study, better understand written text, better manage stressful situations, that their powers of imagination have improved, and that they are generally more contented.

## References

- [1] Cooper, J. O., Heron, T. E., Heward, W. L. (2014). *Applied Behavior Analysis* (2<sup>nd</sup> edition). Harlow: Pearson.
- [2] Děrované brýle – přirozené zlepšení zraku. (2017). *Jak zlepšit zrak* [online]. Jak zlepšit zrak [retrieved 2020-10-28]. Accessible at: <http://jakzlepsitzrak.cz/derovane-bryle/>.
- [3] Hosek, E. T. (2007). Funkcionální optometrie – teorie a cíle. *Česká oční optika* [online]. 48(2), 50–51 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2007\\_02.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2007_02.pdf).
- [4] Hromádková, L. (1995). *Šilhání*. Brno: Institut pro další vzdělávání pracovníků ve zdravotnictví v Brně.
- [5] Nováková, M. (2007). Vizuální terapie. *Česká oční optika* [online]. 48(4), 32–33 [retrieved 2020-03-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2007\\_04.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2007_04.pdf).
- [6] Oči – zlepšování zraku cvičením a úpravou stravy. (2020). *Úspěšná léčba: ucelené webové stránky o zdraví – příroda uzdravuje* [online]. Úspěšná léčba. [retrieved 2020-10-28]. Accessible at: <http://jakzlepsitzrak.cz/derovane-bryle/>.
- [7] Vymyslický, I. (2007<sub>a</sub>). Úvod do vizuální optometrie. *Česká oční optika* [online]. 48(3), 38 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2007\\_03.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2007_03.pdf).

- [8] Vymyslický, I. (2007<sub>b</sub>). Vizuální optometrie (Part 2). *Česká oční optika* [online]. 48(4), 32–33 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2007\\_04.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2007_04.pdf).
- [9] Vymyslický, I. (2008<sub>a</sub>). Vizuální optometrie (Part 4). *Česká oční optika* [online]. 49(2), 32–33 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2008\\_02.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2008_02.pdf).
- [10] Vymyslický, I. (2008<sub>b</sub>). Vizuální optometrie (Part 5). *Česká oční optika* [online]. 49(3), 34–35 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2008\\_03.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2008_03.pdf).
- [11] Vymyslický, I. (2008<sub>c</sub>). Vizuální optometrie (Final Part). *Česká oční optika* [online]. 49(4), 48–49 [retrieved 2020-09-24]. Accessible at: [https://www.4oci.cz/dokumenty/pdf/4oci\\_2008\\_04.pdf](https://www.4oci.cz/dokumenty/pdf/4oci_2008_04.pdf). [12] Vymyslický, T. (2011). Vizuální optometrie v praxi [online]. [retrieved 2020-10-27]. Accessible at: <https://is.muni.cz/th/k18d9/>.
- [13] Zdravý zrak přirozeně. (2016). *Lepší oči* [online]. Zrak pro život. [retrieved 2020-10-28]. Accessible at: <https://www.lepsioci.cz>.

## Illustrations

Figure 1: LEA symbols

Vrubel, M. (2020). Personal archive.

Figure 2: Tool for accommodation diagnosis

Vymyslický, T. (2011). Vizuální optometrie v praxi [online]. [retrieved 2020-10-27]. Accessible at: <https://is.muni.cz/th/k18d9/>.

Figure 3: Brock string

Vymyslický, T. (2011). Vizuální optometrie v praxi [online]. [retrieved 2020-10-27]. Accessible at: <https://is.muni.cz/th/k18d9/>.

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# Risk of falls in relation to visual and hearing impairments

(overview essay)

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**Abstract:** *The contribution presents a literary review of the facts about the risk of falls in association with visual and hearing impairments from current studies. Fall is the potential risk for persons with visual and hearing impairments, regardless of age. Stability is influenced by integration and evaluation of visual, vestibular, and somatosensory information. Visually and hearing-impaired people are a potentially weakened target group regarding the disturbed keeping of the postural stability, posture, and balance. The aim of the contribution is to summarize studies that show experiences with problem of falls among individuals with sensory loss.*

**Keywords:** *fall, stability, balance, vision, hearing, impairment*

## 1 Introduction

Falls are a health hazard for the elderly patient. Annually, approximately 30 percent or more of elderly patients will experience such a problem. Seventy percent of deaths from falls occur in the elderly population. Morbidity from falls includes fractures, soft tissue trauma, anxiety about further falls, and loss of confidence. Falls are due to environmental factors; neurologic illness including dementia, drop attacks, and sensory loss; alcohol and drug use; orthostatic; cardiac arrhythmias; and acute illnesses such as infection, heart failure, and gastrointestinal bleeding (Duthie, 1989). As stated Tománková (2019) vision loss and blindness are almost always accompanied with feelings of imbalance and disturbed gait. Similarly, with congenital visual impairment can be recorded in some individuals fear of movement or worry while walking in an unknown space, accompanied by an unsteady walk. The body posture and walking quality are subsequently connected with complex lifestyle, as well as with question of different visual perception of body in space.

Increased incidence of unbalance among people with hearing impairment is primarily on the deaf who have sensory-neural hearing loss. Fault accuracy of kinetic features of foot, static (standing upright stance) and dynamic (movement, walking) leads to significant changes of gait stereotype and individual modifications of the motor assumptions. Throughout the life of impaired persons it is required to take care of the spatial orientation and movement in space, upright body posture training. Also, stability problems of people with hearing impairment are not rare because adequate postural stability requires the integration and evaluation of visual, vestibular, and somatosensory information. Healthy body posture and gait has unimaginable importance in terms of quality of life and social integration of the individuals.

## 2 Selected research surveys in the issue

Gopinath, McMahon, Burlutsky et al. (2016) assessed the association between dual sensory impairment and incidence of falls. We examined the influence of self-perceived hearing handicap and hearing aid use and risk of falls in cohort study of participants followed over 5 years among one thousand four hundred and seventy-eight participants aged 55 and older at baseline were included in longitudinal analyses. Visual impairment was defined as presenting or best-corrected visual acuity less than 20/40 (better eye), and hearing impairment as average pure-tone air conduction threshold  $> 25$  dB HL (500–4,000 Hz, better ear). The shortened version of the hearing handicap inventory for the elderly was administered. Incident falls were assessed over the 12 months before each visit. Cognitive impairment was determined using the Mini-Mental State Examination. Five-year incidence of falls was 10.4%. Participants with severe self-perceived hearing handicap versus no hearing handicap had increased risk of incident falls, multivariable-adjusted OR 1.93 (95% confidence intervals, CI, 1.02–3.64). Hearing aid users versus non-users had 75% increased likelihood of incident falls. Participants with co-existing best-corrected visually impairment and mild hearing loss ( $> 25$  to  $\leq 40$  dB HL) had higher odds of incident falls, OR 2.19 (95% CI 1.03–4.67). After excluding persons with cognitive impairment, this association did not persist. These epidemiological data show that dual sensory impairment in older adults could significantly increase their risk of falling. Grue, Ranhoff, Noro et al. (2009) were looking for prevalence of hearing and vision impairment and their associations with risk of falling in patients aged 75 years or older, admitted to a medical ward in an acute hospital in each of the five Nordic countries. Premorbid data, admission data and history of falls over 3 months were obtained on admission by interview and observation. Hearing impairment was present if the patient required a quiet setting to be able to hear normal speech. Vision impairment was defined as unable to read regular print in a newspaper. Bivariate and logistic regression analyses were performed. 48% of the patients had a hearing

impairment, 32.3% had vision impairment and 20.1% had both. Hearing impairment was associated with falling but not in the logistic regression model.

Hearing and vision impairments were frequent among older patients in the medical wards. Falling was associated with hearing loss, vision, and combined impairments. Sensory loss was also associated with fear of falling. Grue, Kirkevold, & Ranhoff (2009) examined the prevalence of hearing and vision impairments in 65+ year-old patients with hip fractures. They were screened for study of 332 patients. Impairments were defined as problems with seeing, reading regular print, or hearing normal speech. Sixteen per cent of the patients had no sensory impairments, 15.4% had vision impairments, 38.6% had hearing impairments and 30.1% had combined sensory impairments. Results showed the prevalence of combined sensory impairments was: 32.8% none; 52.2% moderate/severe; and 15.1% severe. Patients with hip fractures frequently have hearing, vision, and combined impairments. Lach, Lozano, Hanlon et al. (2020) explored factors associated with fear of falling in 225 patients with vision, hearing, or dual sensory impairment. Fear of falling is associated with vision and hearing impairment. Fifty-one percent of patients was afraid of falling. Residents who were afraid reported better cognition, lower falls self-efficacy, and higher outcome expectancy in the total sample and in most impairment groups. Falls outcome expectancy predicted fear of falls in the total sample and in the visual and hearing sensory impairment groups. Lopez, McCaul, Hankey et al. (2011) were determined if there are gender differences in the associations between visual and hearing impairment and these outcomes. 2340 men and 3014 women aged 76–81 years were followed for an average of 6.36 years. Dependent variables were self-reported vision and hearing impairment. Outcome variables were falls, injuries from falls, physical and mental components of HRQOL (SF-36 physical and mental components) and all-cause mortality. Vision impairment was more common in women and hearing impairment was more common in men. Vision impairment was associated with increased falls risk (odds ratio (OR) = 1.77, 95% CI = 1.35–2.32 in men; OR = 1.82, 95% CI = 1.44–2.30 in women), injuries from falls (OR = 1.69, 95% CI = 1.23–2.34 in men, OR = 1.79, 95% CI = 1.38–2.33 in women), and mortality (hazard ratio (HR) = 1.44; 95% CI = 1.17–1.77 in men; HR = 1.50, 95% CI = 1.24–1.82 in women) and declines in SF-36 PCS and MCS. Hearing impairment was associated with increased falls risk (OR = 1.38, 95% CI = 1.08–1.78 in men; OR = 1.45, 95% CI = 1.08–1.93 in women) and declines in SF-36 physical and mental components. Overall, there were no gender differences in the association between vision and hearing impairment and the outcomes. Skalska, Wizner, Piotrowicz et al. (2013) assessed the prevalence of falls, their circumstances and consequences in the Polish population aged 65 years and older in comparison to younger respondents aged 55–59 years, and the relation of falls to visual and hearing deficits. Mean age of the 4920 elderly subjects (51.6% men) was  $79.4 \pm 8.7$  years. Falls in the past year were

reported by 10.4% of the younger and 19.1% of the older subjects. In both groups falls occurred more frequently in women (11.9% vs. 8.7%,  $p = 0.03$  in the younger and 22.7% vs. 13.2%,  $p < 0.001$  in the older group). In the group of older subjects falls occurred most often during walking (66.7% vs. 50.7% in the group of 55–59 years old),  $p = 0.005$ , while the younger more often fell while practicing sports (5.48% vs. 0.8% in the group 65+,  $p < 0.001$ ) and risky activities (respectively: 13.7% vs. 4.9%,  $p = 0.002$ ). A similar percentage of younger and older fallers reported one (44.0% and 46.1% respectively) or more falls (56.1% and 53.9%;  $p = 0.6$ ). The percentage of recurrent fallers grew with increasing age ( $Cc = 0.177$ ;  $p < 0.001$ ).

The prevalence of injurious falls was similar in the younger and older groups (45.4% and 42.8%,  $p = 0.53$ ). In both genders fall-related injuries were more frequent in younger elderly (65–74 years old) and in subjects 90 years old and older. In the non-standardized analysis and after adjustment for age and gender visual and hearing impairments and its degree were associated with falls but both relations lost statistical significance after adjustment for a set of explanatory variables. Despite somewhat lower estimates, falls in older Poles are no less an important factor influencing overall health than in their populations. As a stated Viljanen, Kaprio, Pyykkö et al. (2009) mobility decline, the coexistence of several sensory difficulties and fear of falling are all common concerns in older people. Data on self-reported fear of falling, difficulties in hearing, vision, balance, and walking 2 km were gathered with a structured questionnaire among 434 women aged 63–76 years at baseline and after a 3-year follow-up. Logistic regression models were used for analyses. Every third participant reported difficulties in walking 2 km at baseline. In cross-sectional analysis, the odds ratio for difficulties in walking 2 km was higher among persons who reported fear of falling compared with persons without fear of falling and the odds increased with the increasing number of sensory difficulties. Persons who reported fear of falling and who had three sensory difficulties had almost fivefold odds (odds ratio = 4.7, 95% confidence interval = 1.9–11.7) for walking difficulties compared with those who reported no fear of falling and no sensory difficulties. Among the 290 women without walking difficulties at baseline, 54 participants developed difficulty in walking 2 km during the 3-year follow-up. Odds ratio for incident walking difficulty was 3.5 (95% confidence interval = 1.6–7.8) in participants with fear of falling and with 2–3 sensory difficulties compared with persons without fear of falling and with at most one sensory difficulty at baseline. Older women who have several coexisting sensory difficulties combined with fear of falling are particularly vulnerable to mobility decline. Avoidance of walking because of fear of falling is likely to be reinforced when multiple sensory difficulties hinder reception of accurate information about the environment, resulting in accelerated decline in walking ability. Yamada, Vlachova, Richter et al. (2014) examine the prevalence of sensory impairment in nursing home residents, and whether sensory impairment is related to

other common clinical problems in nursing homes, mediated by functional disability, cognitive impairment, and depressive symptoms. Cross-sectional data of 4007 nursing home residents in 59 facilities in 8 countries from the SHELTER study were analyzed. Visual and hearing impairments were assessed by trained staff using the interRAI instrument for Long-Term Care Facilities. Generalized linear mixed models adjusted for functional disability, cognitive impairment, and depressive symptoms were used to analyze associations of sensory impairments with prevalence of clinical problems, including behavioral symptoms, incontinence, fatigue, falls, problems with balance, sleep, nutrition, and communication. Of the participants, 32% had vision or hearing impairment (single impairment) and another 32% had both vision and hearing impairments (dual impairment). Residents with single impairment had significantly higher rates of communication problems, fatigue, balance problems, and sleep problems, as compared with residents without any sensory impairment. Those with dual impairment had significantly higher rates of all clinical problems assessed in this study as compared with those without sensory impairment. For each clinical problem, the magnitude of the odds ratio for specific clinical problems was higher for dual impairment than for single impairment. Visual and hearing impairments are associated with higher rates of common clinical problems among nursing home residents, independent of functional disability, cognitive impairment, and depressive symptoms.

The study of Campos, Ramkhalawansingh, Pichora-Fuller et al. (2018) explore the role of hearing in self-motion perception across a range of mobility-related behaviors. They assessed age-related changes in auditory self-motion perception and the potential consequences to performance on mobility-related tasks. They describe age-related changes to other sensory and cognitive functions and that may interact with hearing loss in ways that affect mobility (falls). Jiam & Agrawal (2016) evaluated the current evidence for an association between hearing loss and falls risk. Twelve eligible studies were identified. The odds of falling were 2.39 times greater among older adults with hearing loss than older adults with normal hearing (pooled odds ratio 2.39, 95% confidence interval [CI]: 2.11–2.68). In sensitivity analyses, we restricted the meta-analysis to studies where hearing loss was audiometrically defined ( $N = 6$ ) and observed hearing loss to be associated with a 69% increase in the odds of falling (pooled odds ratio 1.69, 95% CI: 1.18–2.19). When we further limited to studies that also performed multivariate regression analyses ( $N = 4$ ), the overall effect size did not appreciably change (pooled odds ratio 1.72, 95% CI: 1.07–2.37). We observed a potential positive publication bias in the literature. Limitations of the systematic review and meta-analysis are the cross-sectional designs of most studies and the heterogeneity across studies ( $Q = 631$ ,  $P < .05$ ,  $I^2 = 98.1\%$ ). In the published literature, hearing loss is associated with significantly increased odds of falling in older adults. As a stated Lichtenstein (1992) visual loss is a common age-associated disability that

has effects in multiple domains of function. Visual loss especially increases the risk of falls and hip fractures and may limit the ability of an older individual to safely operate a car. The ability to remediate visual disability depends on the cause of the underlying impairments and the relative effectiveness of treatment for each. Sight restoration can be dramatic for selected patients with cataracts. Sight preservation is also excellent for persons with diabetic retinopathy. For those with macular degeneration, the data are hopeful but less compelling. Although persons with glaucoma should receive medications to lower their intraocular pressure, experimental evidence that this, in fact, preserves vision is currently lacking. The geriatrician's role in visual rehabilitation consists of the identification of the impairments, determination of the impact of visual loss on other functional domains, and appropriate referral to an ophthalmologist for full assessment and treatment. If severely limited by permanent visual losses, the patient should be referred for appropriate support services. Viljanen, Kulmala, Rantakokko et al. (2012) examined whether hearing acuity predicts falls and whether the potential association is explained by postural balance and examined whether shared genetic or environmental effects underlie these associations. Hearing was measured using a clinical audiometer as a part of the Finnish Twin Study on Aging in 103 monozygotic and 114 dizygotic female twin pairs aged 63–76 years. Postural balance was indicated as a center of pressure movement in semi-tandem stance, and participants filled in a fall-calendar daily for an average of 345 days after the baseline. Mean hearing acuity (better ear hearing threshold level at 0.5–4 kHz) was 21 dB. Means of the center of pressure velocity moment for the best to the poorest hearing quartiles increased linearly from 40.7 mm<sup>(2)</sup>/s (SD 24.4) to 52.8 mm<sup>(2)</sup>/s (SD 32.0) (p value for the trend = .003). Altogether 199 participants reported 437 falls. Age-adjusted incidence rate ratios for falls, with the best hearing quartile as a reference, were 1.2 (95% CI = 0.4–3.8) in the second, 4.1 (95% CI = 1.1–15.6) in the third, and 3.4 (95% CI = 1.0–11.4) in the poorest hearing quartiles. Adjustment for center of pressure velocity moment decreased incidence rate ratios markedly. Twin analyses showed that the association between hearing acuity and postural balance was not explained by genetic factors in common for these traits. People with poor hearing acuity have a higher risk for falls, which is partially explained by their poorer postural control. Auditory information about environment may be important for safe mobility.

Impaired vision is highly prevalent and commonly unreported in the elderly population particularly in women and those living in nursing homes. Measurement of visual functions such as visual acuity, contrast sensitivity and depth perception may identify older people at risk of falls and hip fracture. Visual loss in older people is correctable in most cases. Intervention strategies, for example, change of glasses or cataract extraction may have the potential of improving visual function and preventing falls in older people (Abdelhafiz & Austin, 2003). Coleman, Stone, Ewing et al. (2004) determined the association between changes in visual acuity and frequent



falls in older women in prospective cohort study. Two thousand two elderly community-residing women participating in the Study of Osteoporotic Fractures with measurements of visual acuity at baseline and a follow-up examination 4 to 6 years later (mean of 5.6 years). Binocular visual acuity with habitual correction was measured under standard illumination using Bailey-Lovie charts at baseline and fourth examinations. Change in visual acuity was stratified into 5 categories: no change or visual acuity gain, loss of 1 to 5 letters, loss of 6 to 10 letters, loss of 11 to 15 letters, and loss of > 15 letters. A separate analysis considered decline in visual acuity as the loss of > or = 10 letters (> or = 2 lines) on the Bailey-Lovie acuity measure between baseline and follow-up examinations. Data on falls were obtained from postcards sent every 4 months after the follow-up examination. Frequent falling was defined as > or = 2 falls during a 1-year period after the follow-up examination. Compared with women with stable or improved visual acuity, women with declining acuity had significantly greater odds of experiencing frequent falling during the subsequent year. Odds ratios after adjustment for baseline acuity and other confounders were 2.08 (95% confidence interval [CI]: 1.39–3.12) for loss of 1 to 5 letters, 1.85 (95% CI: 1.16–2.95) for loss of 6 to 10 letters, 2.51 (95% CI: 1.39–4.52) for loss of 11 to 15 letters, and 2.08 (95% CI: 1.01–4.30) for loss of >15 letters. In the analysis of visual decline defined as a loss of > or = 10 letters, heightened risk of frequent falling was evident in each of 2 subgroups defined by splitting the sample on baseline visual acuity, with borderline significant evidence of a more pronounced effect in those women with baseline visual acuity of 20/40 or worse (P value for interaction, 0.083). Loss of vision among elderly women increases the risk of frequent falls. Prevention or correction of visual loss may help reduce the number of future falls. Coleman, Cummings, Yu et al. (2007) examined the relationship between binocular visual field loss and the risk of incident frequent falls in older white women in multicenter, prospective cohort study among four thousand seventy-one community-dwelling white women aged 70 and older participating in the study of osteoporotic fractures. Primary outcome was incident frequent falls, defined as two or more falls within 1 year. Primary risk factors were binocular visual field loss, distance visual acuity in the better eye, and contrast sensitivity at low spatial frequency in the better eye. Of 4,071 women, 409 (10%) had severe binocular visual field loss at the eye examination, and 643 (16%) experienced frequent falls within 1 year after their eye examination. Severe binocular visual field loss was significantly associated with frequent falls when adjusting for age, study site, and cognitive function (odds ratio=1.50, 95% confidence interval=1.11–2.02). The data showed a trend for increasing odds of two or more falls with greater binocular visual field loss (P < .001). In older white women with severe binocular visual field loss, 33.3% of frequent falls were attributable to visual field loss. Women with binocular visual field loss are at greater risk of future frequent falls. Screening for binocular visual field loss may identify individuals at high risk

of falling. Cumming, Ivers, Clemson et al. (2007) determined the efficacy of vision and eye examinations, with subsequent treatment of vision problems, for preventing falls and fractures in frail older people in randomized, controlled trial among six hundred sixteen men and women aged 70 and older (mean age 81) recruited mainly from people attending outpatient aged care services. The intervention group received comprehensive vision and eye examinations conducted by a study optometrist. The optometrist arranged for new eyeglasses for 92 subjects and referred 24 for a home visit with an occupational therapist, 17 for glaucoma management, and 15 for cataract surgery. The control group received usual care. Falls and fractures during 12 months of follow-up were ascertained according to self-report using a monthly postcard system. Fifty-seven percent of subjects fell at least once during follow-up. Falls occurred more frequently in the group randomized to receive the vision intervention (65% fell at least once; 758 falls in total) than in the control group (50% fell at least once; 516 falls in total). The falls rate ratio using the negative binomial model was 1.57 (95% confidence interval (CI) = 1.20–2.05,  $P = .001$ ). Fractures were also more frequent in the intervention group (31 fractures) than the control group (18 fractures; relative risk from proportional hazards model 1.74, 95% CI = 0.97–3.11,  $P = .06$ ). In older people, comprehensive vision, and eye assessment, with appropriate treatment, does not reduce, and may even increase, the risk of falls and fractures.

The relationship between several aspects of vision and falling/fractures examined de Boer, Pluijm, Lips et al. (2004) in a prospective cohort study in 1,509 older men and women. The analyses showed that impaired vision is an independent risk factor for both recurrent falling and fractures. A total of 1,509 people was examined in 1995–1996. Contrast sensitivity was assessed with the VCTS\_6000-1 chart for near vision. In addition, self-reported visual impairment was assessed by questions on recognizing faces from 4m, reading the small print in the newspaper, and problems with glare. Furthermore, many potential confounders and mediators were assessed. Falls and fractures were assessed prospectively during a 3-year follow-up period. The associations between the vision variables and falls and fractures were examined using Cox proportional hazards analyses. After adjustment for potential confounders, contrast sensitivity was shown to be associated with recurrent falling (hazard ratio is 1.5), and the question on recognizing faces was shown to be associated with fractures (hazard ratio is 3.1). Furthermore, functional limitations and physical performance were shown to be mediators in the relationship between vision variables and recurrent falling/fractures. The results indicate that impaired vision is an independent risk factor for falling and fractures, but different aspects of visual functioning may have different relationships to falling and fractures. Dhital, Pey & Stanford (2010) summarized the current literature and point to further studies which need to be undertaken. Changes in visual components such as visual field, acuity, contrast sensitivity and stereopsis all have a part and the co-existence of other sensory impairments

certainly increases the risk of falls. However there remain considerable gaps in our knowledge of the relationship between visual loss and falls, for example in patients with diabetic eye disease. Furthermore, there is also conflicting data as to the importance of different visual components. Various interventions, such as programmed inter-disciplinary involvement, have shown promise, however these need further confirmation of their efficacy and cost effectiveness. An added confounder may be that an intervention (e.g., cataract extraction) paradoxically affects an individual's future activity level and behavior, thereby increasing the risk of falling. With an ageing population the importance of this topic is likely to increase. By Harwood (2001) visual impairment is a risk factor for falls, on average approximately doubling falls risk in a wide variety of studies. Falls risk increases as visual impairment worsens. The relationship is almost certainly causal. Vision accounts for perhaps a quarter to a half of all falls, although this estimate is imprecise. Visual impairment in 70% or more of elderly people is remediable with relatively simple interventions (correcting refractive errors and cataract surgery), making it an important potential target for intervention at the population level. However, no intervention has yet been proven to reduce falls risk in a randomized controlled trial. Kulmala, Viljanen, Sipilä (2009) studied visual acuity and co-existing hearing impairment and poor standing balance as predictors of falls in prospective study with 1-year follow-up among 428 women aged 63–76 years from the Finnish Twin Study on Aging. Participants were followed up for incidence of falls over 1 year. Visual acuity, hearing ability and standing balance were assessed at the baseline. The incidence rate ratios for falls were computed using the negative binomial regression model. During the follow-up, 47% of participants experienced a fall. After adjusting for age and interdependence of twin sisters, participants with vision impairment (visual acuity of  $< 1.0$ ) but no other sensory impairments had a higher, but non-significant, risk for falls compared to persons with normal vision (incidence rate ratios are 1.5, 95% CI 0.6–4.2). Co-existing vision impairment and impaired balance increased the risk (incidence rate ratios are 2.7, 95% CI 0.9–8.0), as also did co-existing vision and hearing impairment (incidence rate ratios are 4.2, 95% CI 1.5–11.3), compared to those with normal vision. Among persons with all three impairments, the incidence rate ratios for falls increased to 29.4 (95% CI 5.8–148.3) compared to participants with good vision. The impact of vision impairment on fall risk was higher when accompanied with other sensory and balance impairments, probably because the presence of other impairments prevented the reception of compensatory information about body posture and environment being received from other sensory sources.

When aiming to prevent falls and their consequences in older people, it is important to check whether poor vision is accompanied with other impairments. Lord, Smith & Menant (2010) claim that multifocal glasses can add to risk of falls by impairing contrast sensitivity, depth perception, and ability to negotiate obstacles.

Vision assessment and provision of new spectacles may not reduce, and may even increase, the risk of falls. Restriction of the use of multifocal glasses may reduce falls in active older people. Other effective fall prevention strategies include maximizing vision through cataract surgery and occupational therapy interventions in visually impaired older people. Lord (2006) notes that most studies have found that poor visual acuity increases the risk of falls. However, studies that have included multiple visual measures have found that reduced contrast sensitivity and depth perception are the most important visual risk factors for falls. Multifocal glasses may add to this risk because their near-vision lenses impair distance contrast sensitivity and depth perception in the lower visual field. This reduces the ability of an older person to detect environmental hazards. There is now evidence that maximizing vision through cataract surgery is an effective strategy for preventing falls. Further randomized controlled trials are required to determine whether individual strategies (such as restriction of use of multifocal glasses) or multi-strategy visual improvement interventions can significantly reduce falls in older people. Loriaut, Boyer, Massin & Cochereau (2014) investigated the relationship between visual impairment and fall-related hip fracture and to determine the etiology of visual impairment in a population of elderly patients with hip fracture. A case-control study compared 96 patients diagnosed with hip fracture to a randomly selected control group of 103 patients without hip fracture. Inclusion criteria for the case group were as follows: patients aged 60 years and over with a hip fracture. Clinical assessment included visual acuity and ophthalmic examination. Forty-three patients with hip fracture had a visual impairment compared to only 12 patients in the control group. Visual impairment was a significant risk factor for hip fracture (OR = 6.15; 95% CI 2.98–12.69). Twenty-seven hip fracture patients had an uncorrected refractive error compared to only 15 controls (OR = 2.78; 95% CI 0.92–8.35). There was no significant difference of dense cataract between both groups (OR = 2.28; 95% CI 0.75–6.93). Fourteen hip fracture patients had a macular degeneration compared to only 8 controls (OR = 5.63; 95% CI 1.57–20.18), and 10 patients had suspicion of glaucoma compared to only 5 controls (OR = 10.65; 95% CI 2.21–51.3). Visual impairment was significantly associated with an increased risk of hip fracture in elderly people. There are many etiologies that may contribute to hip fractures, most notably refractive error, cataract, macular degeneration, and glaucoma. Reed-Jones, Solis, Lawson et al. (2013) assert that falls are a leading cause of mortality among older adults worldwide. With the increasing aging population, falls are rapidly becoming a public health concern. Numerous internal and external factors have been associated with an older adult's increased risk of falling. Most notably visual impairments are gaining recognition for their critical role in fall events, particularly related to trips, slips and falls due to environmental hazards. Wood, Lacherez, Black et al. (2011) state that age-related macular degeneration is the leading cause of irreversible visual impairment among older adults. This study explored the

relationship between age-related macular degeneration, fall risk, and other injuries and identified visual risk factors for these adverse events. Participants included 76 community-dwelling individuals with a range of severity of age-related macular degeneration (mean age,  $77.0 \pm 6.9$  years). Baseline assessment included binocular visual acuity, contrast sensitivity, and merged visual fields. Participants completed monthly falls and injury diaries for 1 year after the baseline assessment. Overall, 74% of participants reported having either a fall or a non-fall-related injury. Fifty-four percent of participants reported a fall and 30% reported more than one fall; of the 102 falls reported, 63% resulted in an injury. Most occurred outdoors (52%), between late morning and late afternoon (61%) and when navigating on level ground (62%). The most common non-fall-related injuries were lacerations (36%) and collisions with an object (35%). Reduced contrast sensitivity and visual acuity were associated with increased fall rate, after controlling for age, sex, cognitive function, cataract severity, and self-reported physical function. Reduced contrast sensitivity was the only significant predictor of non-fall-related injuries. Among older adults with age-related macular degeneration, increased visual impairment was significantly associated with an increased incidence of falls and other injuries. Reduced contrast sensitivity was significantly associated with both increased rates of falls and other injuries, while reduced visual acuity was only associated with increased fall rate.

### 3 Conclusion

Vision loss and blindness are almost always accompanied with problem of falls. Also, problems of falls of hearing-impaired people are not rare because adequate postural stability requires the integration and evaluation of visual, vestibular, and somatosensory information. With an ageing people the importance of this topic is likely to increase. Falls are an important health topic. Vision and hearing are getting worse with age. Sensory problems of people are often overlooked and underestimated. Loss of these senses is associated with increased risk of falls, possible injuries from falls, in the worst case with mortality. The findings of current studies have important meaning for awareness of healthcare professionals with goal to improve of the health care with priority in the future fall prevention of visually and hearing-impaired older adults.

### References

- [1] Abdelhafiz, A. H., & Austin, C. A. (2003). Visual factors should be assessed in older people presenting with falls or hip fracture. *Age Ageing*, 32(1), 26–30. doi:10.1093/ageing/32.1.26.
- [2] de Boer, M. R., Pluijm, S. M., Lips, P., Moll, A. C., Völker-Dieben, H. J., Deeg, D. J., & van Rens, G. H. (2004). Different aspects of visual impairment as risk factors for falls and fractures in older men and women. *Journal of Bone and Mineral Research*, 19(9), 1539–47. doi:10.1359/JBMR.040504.

- [3] Campos, J., Ramkhalawansingh, R., & Pichora-Fuller, M. K. (2018). Hearing, self-motion perception, mobility, and aging. *Hearing Research*, 369, 42–55. doi:10.1016/j.heares.2018.03.025.
- [4] Coleman, A. L., Stone, K., Ewing, S. K., Nevitt, M., Cummings, S., Cauley, J. A., Ensrud, K. E., Harris, E. L., Hochberg, M. C., & Mangione, C. M. (2004). Higher risk of multiple falls among elderly women who lose visual acuity. *Ophthalmology*, 111(5), 857–62. doi:10.1016/j.ophtha.2003.09.033.
- [5] Coleman, A. L., Cummings, S. R., Yu, F., Kodjebacheva, G., Ensrud, K. E., Gutierrez, P., Stone, K. L., Cauley, J. A., Pedula, K. L., Hochberg, M. C., & Mangione, C. M. (2007). Study Group of Osteoporotic Fractures. Binocular visual-field loss increases the risk of future falls in older white women. *Journal of the American Geriatrics Society*, 55(3), 357–364. doi:10.1111/j.1532-5415.2007.01094.x.
- [6] Cumming, R. G., Ivers, R., Clemson, L., Cullen, J., Hayes, M. F., Tanzer, M., & Mitchell, P. (2007). Improving vision to prevent falls in frail older people: a randomized trial. *Journal of American Geriatrics Society*, 55(2), 175–181. doi: 10.1111/j.1532-5415.2007.01046.x.
- [7] Dhital, A., Pey, T., & Stanford, M. R. (2010). Visual loss and falls: a review. *Eye (Lond)*, 24(9), 1437–1446. doi: 10.1038/eye.2010.60.
- [8] Duthie, E. H. Jr. (1989). Falls. *Medical Clinics of North America*, 73(6), 1321–1336. doi:10.1016/s0025-7125(16)30601-0.
- [9] Grue, E. V., Kirkevold, M., & Ranhoff, A. H. (2009). Prevalence of vision, hearing, and combined vision and hearing impairments in patients with hip fractures. *Journal of Clinical Nursing*, 18(21), 3037–3049. doi: 10.1111/j.1365-2702.2009.02856.x.
- [10] Grue, E. V., Ranhoff, A. H., Noro, A., Finne-Soveri, H., Jensdóttir, A. B., Ljunggren, G., Bucht, G., Björnson, L. J., Jonsén, E., Schroll, M., & Jónsson, P. V. (2009). Vision and hearing impairments and their associations with falling and loss of instrumental activities in daily living in acute hospitalized older persons in five Nordic hospitals. *Scandinavian Journal of Caring Sciences*, 23(4), 635–643. doi:10.1111/j.1471-6712.2008.00654.x.
- [11] Gopinath, B., McMahon, C. M., Burlutsky, G., & Mitchell, P. (2016). Hearing and vision impairment and the 5-year incidence of falls in older adults. *Age Ageing*, 45(3), 409–414. doi: 10.1093/ageing/afw022.
- [12] Harwood, R. H. (2001). Visual problems and falls. *Age Ageing*, 30, 4:13–8. doi: 10.1093/ageing/30.suppl\_4.13.
- [13] Jiam, N. T., Li, C., & Agrawal, Y. (2016). Hearing loss and falls: A systematic review and meta-analysis. *Laryngoscope*, 126(11), 2587–2596. doi:10.1002/lary.25927.
- [14] Kulmala, J., Viljanen, A., Sipilä, S., Pajala, S., Pärssinen, O., Kauppinen, M., Koskenvuo, M., Karpio, J., & Rantanen, T. (2009). Poor vision accompanied with other sensory impairments as a predictor of falls in older women. *Age Ageing*, 38(2), 162–167. doi: 10.1093/ageing/afn228.
- [15] Lach, H. W., Lozano, A. J., Hanlon, A. L., & Cacchione, P. Z. (2020). Fear of falling in sensory impaired nursing home residents. *Aging and Mental Health*, 24(3), 474–480. doi:10.1080/13607863.2018.1537359.
- [16] Lichtenstein, M. J. (1992). Hearing and visual impairments. *Clinics in Geriatric Medicine*, 8(1), 173–182.
- [17] Lopez, D., McCaul, K. A., Hankey, G. J., Norman, P. E., Almeida, O. P., Dobson, A. J., Byles, J. E., Yeap, B. B., & Flicker, L. (2011). Falls, injuries from falls, health related quality of life and mortality in older adults with vision and hearing impairment – is there a gender difference? *Maturitas*, 69(4), 359–364. doi:10.1016/j.maturitas.2011.05.006.
- [18] Lord, S. R. (2006). Visual risk factors for falls in older people. *Age Ageing*, 35, 2:ii42–ii45. doi: 10.1093/ageing/afl085.

- [19] Lord, S. R, Smith, S. T., & Menant, J. C. (2010). Vision and falls in older people: risk factors and intervention strategies. *Clinics in Geriatric Medicine*, 26(4), 569–581. doi:10.1016/j.cger.2010.06.002.
- [20] Loriaut, P., Boyer, P., Massin, P., & Cochereau, I. (2014). Visual impairment and hip fractures: a case-control study in elderly patients. *Ophthalmic Research*, 52(4), 212–216. doi: 10.1159/000362881.
- [21] Reed-Jones, R. J., Solis, G. R., Lawson, K. A., Loya, A. M., Cude-Islas, D., & Berger, C. S. (2013). Vision and falls: a multidisciplinary review of the contributions of visual impairment to falls among older adults. *Maturitas*, 75(1), 22–28. doi:10.1016/j.maturitas.2013.01.019.
- [22] Skalska, A., Wizner, B., Piotrowicz, K., Klich-Rączka, A., Klimek, E., Mossakowska, M., Ro-  
wiński, R., Kozak-Szkopek, E., Jóźwiak, A., Gąsowski, J., & Grodzicki, T. (2013). The prevalence  
of falls and their relation to visual and hearing impairments among a nation- wide cohort of older  
Poles. *Experimental Gerontology*, 48(2), 140–146. doi:10.1016/j.exger.2012.12.003.
- [23] Tománková, K. (2019). Postural stability and postural control in visually and hearing impaired  
persons. *Journal of Exceptional People*, 14(1), 53–60.
- [24] Viljanen, A., Kaprio, J., Pyykkö, I., Sorri, M., Pajala, S., Kauppinen, M., Koskenvuo, M., & Ranta-  
nen, T. (2009). Hearing as a predictor of falls and postural balance in older female twins. *The Jour-  
nals of Gerontology, Series A: Biological Sciences and Medical Sciences*, 64(2), 312–317. doi:10.1093/  
gerona/gln015.
- [25] Viljanen, A., Kulmala, J., Rantakokko, M., Koskenvuo, M., Kaprio, J., & Rantanen, T. (2012). Fear  
of falling and coexisting sensory difficulties as predictors of mobility decline in older women.  
*The Journals of Gerontology, Series A: Biological Sciences and Medical Sciences*, 67(11), 1230–1237.  
doi:10.1093/gerona/gls134.
- [26] Wood, J. M., Lacherez, P., Black, A. A., Cole, M. H., Boon, M. Y., & Kerr, G. K. (2011). Risk of  
falls, injurious falls, and other injuries resulting from visual impairment among older adults with  
age-related macular degeneration. *Investigative Ophthalmology & Visual Science*, 52(8), 5088–5092.  
doi: 10.1167/iops.10-6644.
- [27] Yamada, Y., Vlachova, M., Richter, T., Finne-Soveri, H., Gindin, J., van der Roest, H., Denking-  
er, M. D., Bernabei, R., Onder, G., & Topinkova, E. (2014). Prevalence and correlates of hearing and  
visual impairments in European nursing homes: results from the SHELTER study. *Journal of the  
American Medical Directors Association*, 15(10), 738–743. doi:10.1016/j.jamda.2014.05.012.

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# Artistic expression and therapeutic aspects of therapy

(overview essay)

Katarína Majzlanová

**Abstract:** *Presentation of experience in the application of expressive therapies for children with special educational needs. Through dramatherapeutical, paratheatrical approaches with educational focus Role plays, Psychodrama, Forum Theatre, Playback Theatre, Theatre bibliotherapeutic Approach (Working with a story, Poetotherapy, Paremiological Therapy) study of possible positive effects of variables (artistic and therapeutic) on changes in behavior and perception of a child.*

**Keywords:** *Expressive Therapy educational process, the therapeutic aspect of artistic and educational approaches, paratheatrical approaches of educational nature*

## 1 Introduction

Art can have a positive impact on all areas of human life – play, work, learning, creativity, etc. It provides opportunities to express feelings to develop thoughts and to get creativity which opens communication channels.

Participation and involvement in drama activities that may result in theatrical form, as well as purposeful systematic work in this area shall contribute to an individual's developing, enhancing specific skills such as listening, improving physical expression, verbal and non-verbal expression, ability to solve challenges to further social interaction.

Application of art through expressive therapeutical activities can be used with healthy children and also individuals with special educational needs to develop their creativity, quality of attention, self-control and positive forms of behavior. The main objective is to help children with special educational needs to develop their own potential, to lead to a discussion, to express their own experience and impressions.

Through art, children learn to understand the nature of theatrical or literary characters, their internal and external quality, the plot outline, its structure, the function of the theatre, which also includes cooperation in the creation of scenes, props, lighting and costumes, story creation and evaluation of aesthetic criteria.

**Expressive therapy** is based on the internationally accepted concept which is expressed as a specific (usually artistic) medium, primarily including art therapy, bibliotherapy, drama therapy, psychomotoric therapy, music therapy, play therapy and ergotherapy. So called art therapies, which form an integral part of the therapeutic – formative psychological, medical and special approaches can be defined as intentional purposeful and systematic action through perception, creation and experience on the disabled, handicapped or otherwise vulnerable individuals to achieve certain changes in behavior, perception, to gain the ability to solve, but also to deal with specific situations and problems.

## **2 The research of the application of expressive therapeutic approaches with children showing symptoms of emotional and social disorders**

Therapeutic meetings (drama therapy and bibliotherapy) we realized with a group of boys aged 12–13 years, in whom certain disorders in social interaction and communication, aggressive behavior, problems with concentration during the learning process were observed. **The aim of the meetings** (15) was self-knowledge, ventilation of their own feelings, obtaining corrective experiences of self-expression, self-realization, improving of the orientation in their own feelings and reactions as well as other members of the group, creating of a supportive environment.

**In the initial meeting** we introduced games to make contact, to relax eliminate stress, activate their imagination.

*The main part* of these drama therapeutical meetings consisted of working with a story – we used a fairy tale Tin Soldier by H. Ch. Andersen.

**In the first phase** of the main part we applied

- *non-verbal techniques* – statues of tin soldiers, the game of mirrors (collective in pairs), to show the activities of the main characters in the story, mime, etudes...;
- *typological characterization of the characters* in the fairy tale, looking for motives of their behavior, retelling the story, collective improvisation of the plot, projective technique with a picture of the tin soldier (expression of his feelings in certain positions).

### The second phase included

- the completion of the story by children – anyone could interrupt the story and suggest changes in it or in the characters behavior and action;
- *creation of new versions of the stories* in writing by means of the given scheme:  
Who is the main character?  
What does he want to achieve?  
Obstacle  
How to overcome it (who can help)?  
Conclusion of story

### The third phase included

- *playback of stories* (during the meetings each child's story was used) – *exchange of roles, completion of the story*, focusing the game on certain important areas for the child;
- *discussion and the reflection of the players* (realized between playbacks of the story).

**Finally**, the meeting included relaxation and relaxation exercises, tests for the measuring of their mood, ritual games – The telephone, Who am I ...

**Table 1:** *A description certain qualities and features of the characters based on stories created by children*

The main character	Conflicts in the story
Soldier (× 5)	strong – weak
King, Prince (3)	good – bad
Batman (2)	depend – scared
Fantomas	struggle between good and evil
Little boy	justice – injustice
Dog	love – hatred
Tiger	revenge – forgiveness
Had	help – distrust
Magician	courage – fear
Policeman	escape – protection

## 2.1 Problems

Missing body parts, aggression, defense (attack) against violence, fear of new situations, the need for help, security, distrust towards oneself, other people, uncertainty, hesitance.

Finished and newly we created stories we analyzed from the following points of view (Modification techniques of stories by M. Lahad, 1992):

B – values and attitudes

A – affective display

S – social moments

I – imagination

C – cognitive approach

Ph – physical strategy

Id – identification (+ positive/negative –)

**Table 2:** *Results BASIC (Ph Id) when working with a story and a picture*

Meeting	B	A	S	I	C	Ph	Id
2	3	12	2	4	8	6	+4/-6
7	6	22	18	9	12	9	+5/-14
15	7	9	22	14	20	11	+8/-4

## 3 Research results

The figures in the table tell you how many times a certain factor in the story occurred with the boys:

**Expression of values and attitudes (B)** in the story gradually progressed – at first children could not clearly express their attitudes.

**Affectivity (A)** culminated at the 7th meeting (mood changes, characters attacking each other, sudden plot deviations ...) – After the first meetings children expressed their feelings, this need later decreased.

**Social situations (S)**, their free expression and projection gradually increased (Being rejected, forced to do something is not pleasant, everybody wanted to help).

A similar shift is evident in **the imagination (I)**, which is reflected in the overall level of the content and formal level of the stories.

**Cognitive factors (C)** – the context, new insights culminated at the 20th meeting, initially these factors were more or less absent.

**The element of physical activity (Ph)** had a slight increase in the stories (Batman arrived to help the soldier, hid behind a cupboard, it was necessary to beat him up ...).

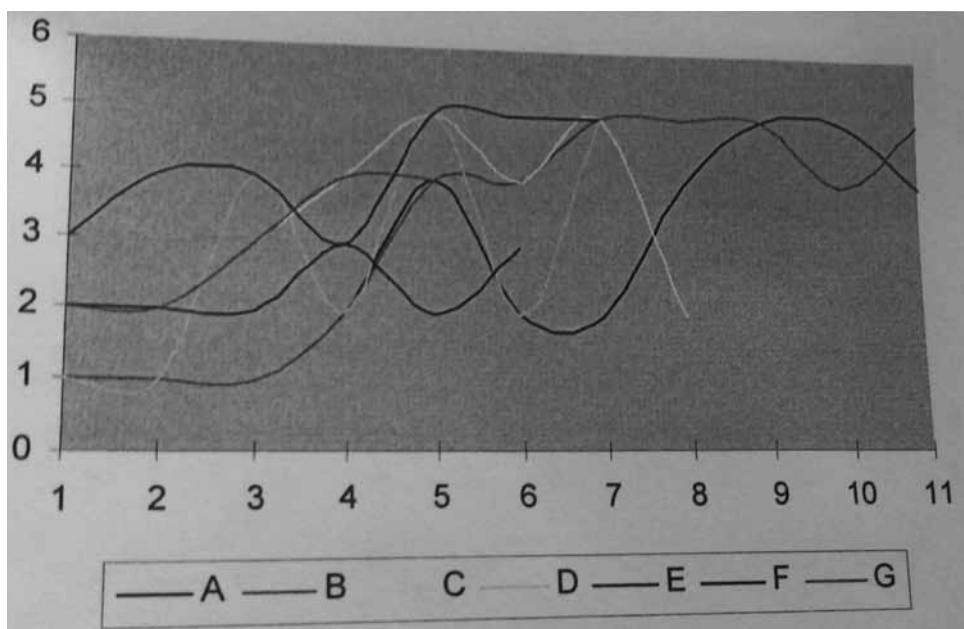
**Positive identification (Id)** with the highest figures at the 15th meeting (Batman helped the weaker as it should be ...) and negative at the 7th meeting (The lion attacked and it should not have done it ...).

### 3.1 The research of the application of expressive therapeutic approaches with socially disadvantaged children

The aim was to find out whether it is possible to develop cooperation creativity and perseverance with children from socially disadvantaged backgrounds by applying expression therapy approaches. The research was conducted with a group of children in the second year of primary school (three boys and four girls) which came from socially disadvantaged backgrounds. In the therapeutic meetings we used drama therapy and bibliotherapy in addition to the elements of art therapy, music therapy, play therapy, KAU and psychomotoric therapy.

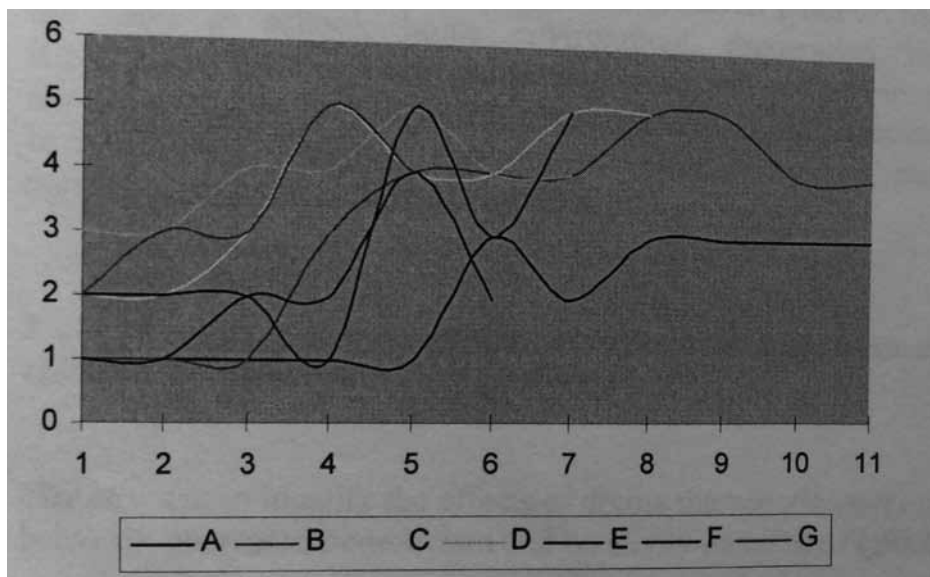
We chose observation as a research method focused on cooperation, creativity and perseverance of children in various activities.

**Graph 1:** *Children's cooperation within the meetings*



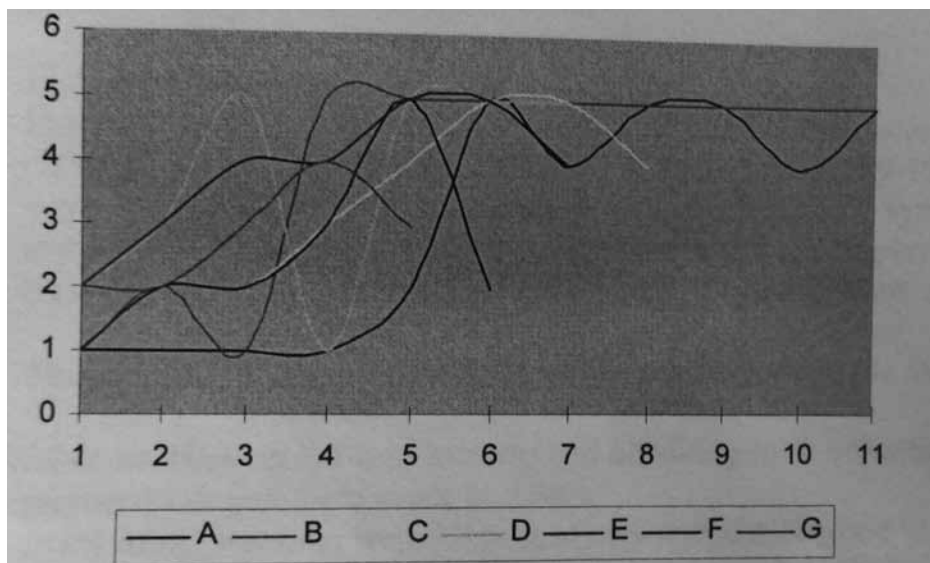
The graph shows an upward trend of the phenomenon. Children gradually engage themselves in activities. Their cooperation was spontaneous, less dependent on the assigned tasks or instructions to play.

**Graph 2: Creativity**



The shift in creativity was reflected in the word production, in games and making products. Favourite ones were artistic and professional activities in combination with listening to music.

**Graph 3: Perseverance**



Initially, the activities often changed, later the meetings had a more stable structure. At the final meetings, the children were more persistent, more concentrated, they were motivated by the meetings themselves, but also the result in the form of the product – the outcome of their activities

## 4 Conclusions

Based on the research results it can be stated that in the course of therapeutic intervention in the application expressive therapies with children, in most cases positive changes in their behavior occurred. Their durability, and stability were more evident, more extensive during the meetings. In the school environment we observed more diverse influences (the fulfillment of the tasks at school, home environment, preparation for the learning process, ...).

Ritual games proved their worth at the beginning and at the end of the meetings and also during drama games, movement games for relaxation, releasing tension and concentration. Much attention was paid to establishing contacts, relaxation, releasing of tension, motivation and support at every meeting during the children's activities.

### 4.1 The research of the application of expressive therapeutic approaches with gifted children showing behavioral problems

*The aim* was to identify the effect of drama therapeutic intervention on problematic behavior, decreased, neuroticism and creativity increase of gifted children.

#### **Research methods**

1. *Questionnaires for teachers to evaluate children's behaviour before and after the intervention of drama therapeutic cantitative expression of behaviour, displayed within the scale, from 0 to 5 points.*
2. *Test B – J. E. P. I. – standardized questionnaire to measure the score N (neuroticism), applied with all the children before and after the intervention (retest).*
3. *Torrance's figural creativity test – examining the components of originality before and after the drama therapeutic intervention.*

#### **The research sample**

Drama therapeutic intervention was realized with children who attended classes for gifted children. The research sample consisted of 8 children aged 9–10 years. The two girls and one boy manifested high neuroticism score with psychosomatic symptoms.

In three boys teacher noticed aggressive behavior. One boy and a girl displayed milder behavioral problems (drawing attention to himself or herself, lack of concentration, shyness...)

## **The progress and implementation of the drama therapeutic intervention**

After establishing the first contacts and obtaining basic information about the children we prepared a drama therapeutic program.

*In the initial meeting*, we mostly used *non-verbal techniques* in order to eliminate tension and focus on the drama activities more (educational etudes with the nature of emotional expression, stories with plot changes ...)

*The games with masks* provided experiences within the boundaries of a new identity and provided children with opportunities to change the customary patterns of behavior.

*In role-playing games*, the children tried the different patterns of behavior and social skills. Improvisation focused on orientation in everyday situations. Situational pantomimes served similar purposes.

*The games with puppets* stimulated imagination and projection of their problems and experience into the game.

*Through dramatization*, children developed communication skills and social interaction.

*Through Improvisation* we focused on the development of creativity and problem solving situations.

We also *worked with stories*, we played fictional situations (In a desert, The plane in fog), situations from their life (Birthday parties, School trips, ...).

*Playback theatre* – in this technique we work with stories based on books, children retell their own dream experiences, they interpret them in the role of actors, using dramatic means. In short improvisational forms and performances we used etudes, mime improvisations and roles. The basic idea is to understand the problem, look at the matter from a different perspective.

*The themes of the Forum Theatre* were most commonly social problems and relationship problems.

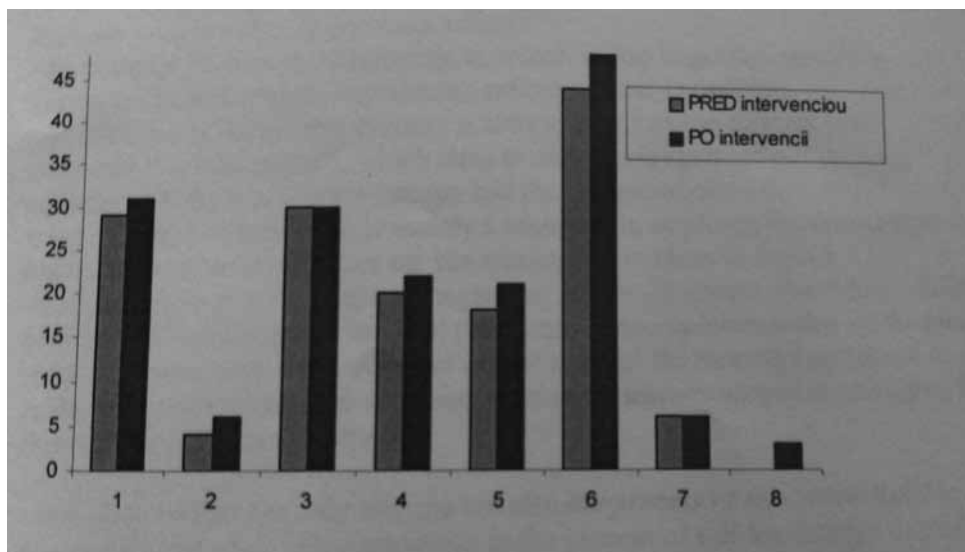
As part of *psychodrama practice*, we often implemented these techniques – a dialogue with music and imagination in preparation for relaxing and concentrating during other activities.

*Psychodrama games* were designed to release tension, development of imagination and emotionality.

*The aim* of drama therapeutic interventions was to focus on the release of psychical tension, developing of self-expression, improvement of mutual communication in a group, positive interaction, developing empathy, the ability to express their feelings, opinions, develop positive feelings, sense of belonging to and acceptance in the group.



**Graph 4:** *The figures in originality tests*



*Note:*

*Pred intervenciu = Before the intervention*

*Po intervencii = After the intervention*

The originality scores after the drama therapeutic intervention were at a higher or on the same level by all the respondents and thus the average figure of the reference mark is higher in the realized sample after the intervention.

In addition to these results, which were shown at the meetings, the positive changes after drama therapeutic intervention in the behavior of children were observed by the teachers and also a school psychologist outside the classroom – in a school club, and nearby schools.

The research suggests that the dramatic expressive activities, playful activities can be an effective preventive means of the gifted children for balancing of their developmental disproportions between the emotional, social and intellectual development of children. These disproportions and inappropriate behavior can cause misunderstanding and various obstacles that may have a negative impact on the overall well-being of the child.

## 5 Summary

The main aim of our work was to study possible impacts and variables (artistic and therapeutic) on changes in behavior and perception of the child.

If we are looking for a relationship ties between variables and components (artistic and therapeutic, educational), there are several consistent principles.

- ***Expressiveness and expression*** are the signs and means of education and therapy. As long as educational objectives focus on specific performance management and are the means of education of pupils, therapeutic aims are focused more on experience, the perception of the client.
- ***Establishing the contact with a client***, creating an atmosphere of trust and understanding requires the full acceptance of the client's condition, and mood by the therapist who himself creates the conditions for certain changes and realization of the objectives that the therapist depending on the client's problems offers.
- ***In addition to therapy***, therapeutic approach is also important therapy guidance from the known to the less known, experiment, reflection, self-knowledge, self-expression.
- ***Realization of expressive therapy*** is always based on the current "state" of clients, the emphasis is on the process, which aims to create safe environment for learning and creative activities. With regard to the therapy and the process of education, even here we can meet some overlaps or fusions. It is mainly a sequence in acquiring the knowledge, skills and habits, the teacher's influence on the atmosphere in class, at school.
- In the process of therapeutic management, access (ill clients, the elderly, children with learning difficulties and behavioral problems ...) ***the implementation of the planning process*** requires a more stable structure and organization of the meetings and space to set out certain rules, greater activity of the therapist, continuous incitement and encouraging the clients during their therapeutic activities.
- It is obvious that not only ***therapy*** but also ***the process of education*** itself is a tool for diagnostics and often self-diagnostic in the process of self-knowledge through artistic experience, processing and responding to new situations. Through therapies we lead the clients to dealing with different situations, better orientation in themselves and in their surroundings.
- Presentation of experience and research in the application of expressive therapies in schools, school facilities and institutions, knowing "mutual" of ***artistic, therapeutic*** and ***educational*** aspects can contribute to clarifications of relational links, overlaps and competence in this field and thereby to more successful mastering of the approaches, and to better communication and cooperation between experts in the field.

## References

- [1] Baley, S. D. (1993). *Wings to fly (Bringing Theatre Bryan dining Arts to Students with special needs)*. Woodbine House.
- [2] Horňáková, M. *Liečebná pedagogika pre pomáhajúce profesie*. Bratislava: Občianske združenie sociálna práca.
- [3] Lahad, M. (1992). *Story making in assessment method for coping with stress*. Six – piece story making and the basic Ph. In Jennings, S. (edit). *Dramatherapy Theory and Practice 2*, London: Routredge.
- [4] Mačišáková, V. (1998). *Emocionálne – sociálne problémy nadaných detí na základnej škole*. In Majzlanová K., a kol. *Interdisciplinárne prístupy v špeciálnej edukácii*. Bratislava: Humanitas.
- [5] Majzlanová, K. (1998). *Dramatoterapia v starostlivosti o mentálne postihnutých*. Speciální pedagogika R. VI. č. 8. Olomouc Univerzita Palackého.
- [6] Majzlanová, K. (2004). *Dramatoterapia v liečebnej pedagogike*. Bratislava: Iris.
- [7] Majzlanová K. a kol. (2011). *Nové smery dramatoterapii – prístupy, výzvy*. Bratislava: A–F Lingua.
- [8] Majzlanová, K. (2003). *Metódy dramatoterapie, dramatoterapia u detí s adaptačnými a emocionálnymi problémami*. In Majzlanová, K. a kol. *Človek v centre liečebnopedagogickej starostlivosti*. Zborník liečebná pedagogika 4–5, Bratislava.
- [9] Majzlanová, K. (2009). *Pedagogická terapia v edukačnom procese*. In Majzlanová, K. – Strédl, Terézia (ed.: Albert Sándor). *Uplatnenie pedagogickej terapie a dramatoterapie v procese edukácie*. Komárno: UJS.
- [10] Marušák, R. (2010). *Literatura v akci. Metody dramatické výchovy při práci s umeleckou literaturou*. Praha: Akademie múzických umění.
- [11] Mitašíková, P. (2011). *Liečebnopedagogické pozorovanie v terapii hrou – formálne a obsahové podmienky*. In *Revue liečebnej pedagogiky* 10, 2011. Bratislava: Pro LP internetový časopis.
- [12] Pilarčíková-Hýblová, S. (1997). *Biblioterapia* 1. vyd. Liptovský Mikuláš: Vydané vlastným nákladom. 74 s.
- [13] Salisbury, B. T. (1986). *Theatre Arts in the Elementary Classroom*. New Orleans: Louisiana.
- [14] Szabová, M. (1998). *Náčrt psychomotorickej terapie*. 2. vyd. Bratislava: Pedagogická fakulta UK, 1998. 148 s.
- [15] Šicková-Fabrics, J. (2002). *Základy arteterapie* 1. vyd. Praha: Portál, 2002. 167 s.
- [16] Valenta, M., Svoboda, P. (2009). *Pojetí expresivně terapeutických přístupů českých, slovenských, finských, řeckých a španělských vysokoškoláků (komparativní šetření)*. In Valenta, M. a kol. *Rukojet dramaterapie*. Olomouc: Univerzita Palackého v Olomouci, PdF.
- [17] Valenta, M., Müller, O., Polínek, M. D. (2010). *Dramatoterapie v institucionální výchově*. Olomouc: Univerzita Palackého, Pedagogická fakulta.

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# Discovering the self through drama and movement: the sesame approach

Pearson, J., & Al. (2006). *Discovering the self through drama and movement: the Sesame approach*. London: Jessica Kingley

## Reviewed by Jakub Vávra

As the title suggests the book is focused on dramatherapy and movement through the point of view of Sesame approach. This specific approach is dedicated to London institute founded by Marian Lindkvist who was the founder of the Sesame approach. This is dedicated to her even though she is not the author or co-author of this book. Clearly the main reason of this book is to introduce the specific approach and the roots based on Laban Mastery of Movement, Slade's Child drama and Jung's Analytical psychology. This mixture of the approaches builds the base for specific drama-therapy approach which is approved by clinical research and long-term practice.

The specific format of the book, which does not have the main author but "only" an editor, explores approaches from psychotherapy, drama, myths, fairytales and much more. The book has been edited by Jenny Pearson and almost each chapter was written by a different author. The whole book is dedicated to Marian Lindkvist, called familiarly Billy. This specific approach to write a book is examined and explored at the beginning of the book by Anthony Stevens in *Foreword*. Stevens talks about the power of the story and the myths and Freud's talking treatment transformed into the drama and body experience.

The chapters are selected and sorted as kind of a story which tells how the Sesame approach was developed. The book is divided into two main parts. The first part is named *Mainly Theory* and places the basis for the second part *Mainly Practice*. Let's look at the parts a little bit closer.

The first main part called "*Part 1: Mainly Theory*" has 14 chapters written by various authors. The chapters are discovering the theme of body, embodiment, and activation of body for dramatherapeutic work. The sections and chapters are dedicated to symbols, Jung and discovering the inner stories connected to our lives. A special chapter, which we want to mention, is Chapter 6 *Drama as Therapy Some Basic principles*. In this chapter authors briefly explain principles of dramatherapy as

a therapeutic discipline and specifics of the Sesame Approach in relation to drama therapy. The chapter also explains how to use an improvisation, how to lead a group and a role of a mask in drama therapy. Chapter 7 describes movement in conception of Marian Lindkvist. Here we can see the connections with following chapters focused on Laban's theory of movement and "body language". Following chapters are dedicated to Peter Slade's Child drama, rituals and at the end of this first part there are Circus skills in relation to drama and drama therapy.

The second main part called "*Part 2: Mainly Practice*" has 16 chapters also written by a number of authors. This part is dedicated to the use of dramatherapy in different treatments. We can mention the psychiatric hospitals, mental health centers, forensic psychiatry and many others. This part is so complex and different in every chapter that reviewing is quite a challenging step. The most valuable aspect for the reader is a different point of view and direct experiences as well as a dedication for practice. By the language of drama this part concludes a treasure in form of concrete steps, description of building group steps and challenging clients and situations.

The language of the book uses advanced English, however, with some patience everybody can read this book. Even though the book *Discovering the Self through Drama and Movement* is written by many authors, the editor of the book J. Pearson did a great job in unification of the language of every chapter with the emphasis of authors' originality. What I personally miss as a reader and drama therapist is stronger accent or dedication on the research or some recommendation to what is missing and what should be done.

Overall, I have to say that this book inspired me in many ways. For me as a reviewer and dramatherapist the book brought me clearer view how the Sesame approach works and what are the pillars of this specific approach. Dedication to movement, dancing and clown part in the approach showed me new perspectives about working with groups of clients. I can warmly recommend this book which seems to be a fresh impetus to Czech dramatherapists.

# Information for authors



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The periodical is going to be published since the year 2012 by the **Institute of Special – pedagogical Studies at Palacky University in Olomouc**.

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