SOCIAL

WELFARE

INTERDISCIPLINARY APPROACH

Scientific journal **SOCIAL WELFARE: INTERDISCIPLINARY APPROACH** is a joint periodic international research edition of Lithuania and Ukraine that presents methodological studies and researches of authors from different countries, reflects variety of scientific sociocultural schools and topics concerning interdisciplinary approach in the understanding of human social welfare. The articles published in the journal are reviewed by two members of the editorial board or their appointed experts. The journal is published twice a year: in June and December. June edition is published in Šiauliai University (Lithuania). December edition is published in Open International University of Human Development "Ukraine" (Ukraine).

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Preface by Editors-in-Chief

We are glad to present the readers the sixth issue of our joint scientific journal "SOCIAL WELFARE *INTERDISCIPLINARY APPROACH*" published by Šiauliai University in Lithuania (by Faculty of Social Welfare and Disability Studies) and Open International University of Human Development "Ukraine" in Ukraine (by Social Technologies Institute). We continue to publish results of international interdisciplinary scientific researches in various aspects of social sphere.

Our society is constantly moving, developing, going through social and qualitative changes. Acute social problems are the basis for political instability and turmoil in any country; unsatisfying living conditions make it impossible to establish democratic government and public institutions. A wave of social and political perturbations has shaken the whole world this year: civil protests in Egypt, France, Greece, Spain and Thailand kept attracting viewer's attention.

Today people are anxiously observing events in Ukraine. Forget political grounds and vectors of Ukrainian Maidan, where hundreds of thousands of average Ukrainians have been protesting for over a month. It seems that the impulse was an unsigned Association Agreement with EU which had to be signed in November 2013 at Vilnius Summit in Lithuania. But the deepest motives of people's protest were abuse of their human rights and social problems of Ukrainian society.

Analytical reports of influential international organisations, such as specialized UN committees, *Human Rights Watch*, *Freedom House*, *Reporters without Borders*, as well as reports of native analytics are full of alarming examples how human rights are violated in Ukraine. For instance, *Freedom House* report "*Sounding the Alarm: Protecting Democracy in Ukraine*" indicates that human rights situation has worsened after 2010: mass media constraints, selective persecution of opposition, restriction of freedom of speech and assembly, non-transparency of local elections etc. As the result *Freedom House* downgraded Ukraine from Free to Partly Free in its rankings.

In *Press Freedom Index* issued by *Reporters without Borders* Ukraine also descended from the 89th rank to the 131st, slightly outpacing Russia (140th).

In its last report *Human Rights Watch* mentioned acts of police arbitrary rule and violation of vulnerable population groups' rights. Besides, it expressed concern over the growing HIV/AIDS epidemic, despite several positive legislative initiatives. On the other hand, social problems are not completely solved in EU either. Regulation of migration remains a Europe-wide problem. Immigrants and refugees, who often can't be given shelter because of interdepartmental barriers, have no opportunity to integrate into country's community and remain marginal, joining the ranks of disadvantaged. As for human trafficking, despite a wide information campaign and a number of legislative initiatives the problem still exists. According to the last report of Special Committee on Organised Crime there are currently about 800 thousand of "slaves" on the EU territory. Directive on preventing and combating trafficking in human beings was adopted back in 2011, but during these 2 years only 6 member states out of 27 adjusted their legislation according to the new requirements.

The world-wide problem is also unemployment. Even young people with higher education swell the ranks of unemployed, which is about 600 thousand people in Ukraine –

three times the size of Ukrainian Army. Qualified specialists often try to emigrate – during the first decade of independence more than 900 Doctors of science left Ukraine.

In terms of average life expectancy (58.8 years according to Associated Press) Ukraine ranks next to last among countries of the European continent. Even in neighbouring Poland average life expectancy is 8 years longer, and in Western Europe it's 11 years longer. Demography indices are also distressing: during its independence period Ukraine has lost more than 10 million of its population.

As a result of the world economic crisis the gap between the richest and the poorest people in Ukraine increased several times, and is constantly growing. More than 30% of Ukrainians live behind poverty line; a large part of population spend most of their earnings purely on food, while in Western Europe most families spend less than one-third or even one-fourth of their income.

At the same time Ukraine lacks the system of government reporting to the society, and the latter has no real influential public bodies. That is why these spontaneous protests of average citizens have become a real surprise for most people. Back in times of Kyiv Rus there was a tradition to gather people for "Viche" (popular assembly) in order to view the most important issues. Alas, with time the tradition was abandoned.

Thus Ukrainian National Viche "Dignity Day" on the 15th of December became so important for the country: more than 200 thousand of civilian population came to Maidan to show their aspiration for European values, civilized life, respect of personality and human rights.

Of course the most pressing social problems can't be solved overnight. But without proper solution the process of harmonious development of European political and legal zone will be difficult and problematic. Events in Ukraine clearly demonstrated the importance of scientists of social sphere in terms of social problems analysis, further developments prediction, search for ways out of crisis and establishment of democratic values, bringing society to a high social level and making future crises impossible.

In this issue of our Journal we publish the results of various social researches from different countries: Lithuania and Ukraine, Czech Republic and Russia, Latvia and USA. The articles in the Journal are presented in English; they are indexed/abstracted in EBSCO: SocINDEX with Full Text (http://search.ebscohost.com), and Copernicus Index (http://journals.indexcopernicus.com).

The Editors-in-Chief acknowledge everyone who has contributed to the publication of the Journal "SOCIAL WELFARE *INTERDISCIPLINARY APPROACH*". Special thanks are for our future readers. We invite you for collaboration and believe that the ideas discussed in the published articles will be received in the community of practitioners and researchers and will be developed and complemented in other scientific works.

Editors-in-Chief Kateryna Kolchenko
and Ingrida Baranauskienė

I. SOCIAL CHALLENGES

PARENTS' AND TEACHERS' ATTITUDE TO FAMILY PLANNING OF ADOLESCENTS WITH MILD INTELLECTUAL DISABILITIES IN THE CONTEXT OF CONCEPTIONS OF GENDER AND SEXUALITY

Neringa Povilaitienė, Liuda Radzevičienė
Šiauliai University, Lithuania

Abstract

There are quite many discussions in society on the issues of disabled people's socialisation and integration. However, formation of disabled pupils' gender identity, their gender, sexuality and family planning has not been sufficiently analysed. The article aims to find out how participants of the educational process (parents and teachers of adolescents with mild intellectual disabilities) treat conceptions of "gender" and "sexuality" and aspects of the dominating attitude to family planning and fertility of pupils with mild intellectual disabilities. It was found out in the research that a considerable share of parents/foster parents did not speak with their children about the future family, and many teachers expressed their negative attitude towards family planning of pupils with mild intellectual disabilities. However, there is also a different dominating opinion about family planning of these pupils in the context of sexuality and gender conceptions. Teachers note that these pupils must receive support in the formation of family relationships, while parents/foster parents seek to render aspects of a successful marriage.

Key words: *disability, gender, sexuality, gender manifestation, family planning, fertility.*

Introduction

There is a considerable focus on the issues of integration of disabled in Lithuania; however, the problem aspect of gender has almost not been analysed. Šėporaitytė (2006) notes that the discourse on disabled in Lithuania is most often directed to fundamental issues related to disabled like social participation, occupation, education, medical and technical assistance. Such issues as sexuality, partnership, family, parenthood, which are important to disabled, have been much less analysed. It has to be noted that gender of a disabled pupil, like gender of a healthy pupil, should be perceived as a natural and very important life peculiarity, as part of the general human health because for a disabled person psychological and emotional aspects of gender are as relevant as for a healthy person.

The process of development of gender and the process of (self-)development of gender identity of pupils with mild intellectual disabilities encompass men's and women's roles, comprehension of cultural norms (social function), and formation of perception of oneself as a representative of a certain sex and of behaviour according to norms and roles accepted in the

society (psychological function). This process takes place in the process of pupils' socialisation, during which people take over culture norms, develop their potential and become full member of society (Martin & Ruble, 2004), whilst (self-)formation of gender identity is one of the preconditions of successful socialisation (Yvi, 2012).

Development of gender starts in the family already in the first year of life. The family is the initial institution which provides life experience, forms character traits and the conception of morality. The importance of family in gender development is also accentuated in *The Programme of Preparation for Family Life and Gender Development* (2007), which emphasises that teaching about mature gender can be successful if parents are treated as children's initial and main educators. Differences in the form and degree of gender development should depend on pupils' age and their level of abilities. Teachers should also remember to promote parents to maintain spiritual cooperation with learners; absence of such cooperation turns moral education into moralising. This cooperation is particularly important in such cases when attitude of parents who have children or adolescents with intellectual disabilities is influenced by anxiety about the child's welfare, lack of knowledge on gender development issues or denial of the child's gender.

Often the conceptions of gender and sexuality are used as synonyms although they are not identical. Giving the same meaning to different conceptions always causes serious comprehension problems (Obelėnienė, Pukelis & Vaitoška, 2007). It must be emphasised that the holistic **conception of gender consists of** *sex* (differentiated according to sex organs, morphological and genetic body composition); *gender* – gender identity (femininity and masculinity) and *sexuality* (which is significant for emergence of sexual arousal and desire, reacting to internal and external stimuli).

In the modern context of gender studies (West & Zimmerman, 1987; Martin & Ruble, 2004; Rogers, 2009, 2010; Rudman & Glick, 2010; Evans & Williams, 2013; Westman, 2010 et al.), women's and men's relationships are discussed using the term *gender*. This term is used to outline categories grounded on gender characteristics, for example in phrases *gender gap* and *the politics of gender* (Žvinklienė, 2004). According to Žvinklienė (2004), the confusion of meaning appears when one term *gender* is used without differention into *sex* and *gender*, this way making a mistake, stating that (biological) sex is constructed and the same term *gender* is used to denote this structure. The author does not criticise purposefulness of using the terms used in the article above (*sex, gender, sexuality*) and does not force to replace them with the term *gender* but offers to use categories and translate them from English more responsibly, paying more attention to their meaning.

According to another scientific interpretation of the investigated phenomenon, three non-identical but sex related concepts can be distinguished analysing the composition and action principles of the phenomenon of social gender. These are: *sex*, *sex category* and *gender* (West & Zimmerman, 1987; Žvinklienė, 2004).

Thus, performing this research, it was sought to find out attitude of parents/foster parents and teachers of adolescents with mild intellectual disabilities towards family planning through gender and sexuality conceptions.

Seeking to systematically organise gender education and cooperation in pupils' socialisation process, it is relevant to find out how the participants of educational processes (parents and teachers) treat the conceptions "gender" and "sexuality" and the essential attitude to family planning and fertility of the adolescent with mild intellectual disabilities.

Research subject: parents' and teachers' attitude to family planning of adolescent with mild intellectual disabilities in the context of gender and sexuality.

Research aim: to disclose parents' and teachers attitude to family planning of adolescent with mild intellectual disabilities in the context of gender and sexuality.

Research methods: qualitative research approach was chosen, consisting of theoretical research methods (content analysis); empirical data were obtained applying interview (written) method.

Parents' and teachers' interview helped to reveal how they treated concepts of *gender* and *sexuality*, their attitude to family planning and fertility of adolescent with mild intellectual disabilities. Research data were processed employing qualitative content analysis; i.e., categorisation of their meanings. Interview data were grouped in categories with subcategories ascribed to them.

The research was attended by 100 informants (66 teachers, 34 parents/foster parents), who took part in the educational process of adolescents with mild intellectual disabilities.

Results and their Analysis

Interpretation of gender conception in the environment of adolescents with mild intellectual disabilities. Analysing parents'/foster parents' attitude to the conception of "gender", three categories were distinguished: *sex*, *gender*, *manifestation of sexuality* (see Table 1). Even thirteen informants speak about gender, emphasising **sex**; i.e., different sexes: "people representing two different sexes", "the difference between a boy and a girl", "understanding about one's sex".

The majority of parents/ foster parents speak about the concept of gender as about differences of social roles and behaviours, representing a different sex. This is construction of gender differences in the process of socialisation, education and habituation (the term *habituation* is related to Pierre Bourdieu's conception of habitus). According to Bourdieu (1990, 2001), men's and women's habitus are formed through symbolic and practical construction, upbringing and socialisation, forming feminine and masculine traits, behavioural approaches, values, expectations, etc. for girls and boys. Based on supporting/non-supporting attitude of the family and society during the habituation process, girls and boys, women and men acquire sexually defined habitus in the educational process, which is formed by social institutions. Later this manifests itself by choices in life, different practices. Thus, relating biological spring and influence made by social environment, the category **gender** is distinguished. Defining gender, the focus is on "gender identity, gender orientation", "human values, relations with people, the person's behaviour, what decisions he/she makes in sexual life", "not only to what sex the person belongs but also determining his/her actions, behaviour, etc.", "communication of persons of two different sexes" as well as influence of education on its formation: "gender is also reflected in toys bought since the very early years for everyone, clothes, conversations", "gender education".

Describing the concept of "gender", teachers, like parents/foster parents, noted the category of **sex** stating that "this was the concept of the woman and the man, exceptional traits of the boy-girl, man-woman", "the man's peculiarity, which was formed before the man was born and was identified upon birth of a person according to external sex organs although external gender did not always correspond to psychological", "physical and hormone processes taking place in our bodies", "approach (understanding) about physiology of different sexes", "knowledge about sexes, their differences, sexual life", etc.

Analysing teachers' subjective opinion about the conception of gender, the category **gender** is significantly more obvious than the category of sex. One of the teachers even particularly emphasised the importance and beauty of gender in the pupil's life: *"The totality of the composition of the organism, functions and behaviour, physical and spiritual beauty of sex. This is a gift that was given to every one of us so that we could better express our love to others. It encompasses a number of emotions, thoughts. Reflects the man's manliness, the woman's womanliness. This is a big asset of the person, etc.".*

Table 1. Interpretation of Parents'/Foster Parents' and Teachers' Conception of Gender in the Environment of Adolescents with Mild Intellectual Disabilities

Catego-ries	Parents/foster parents (N=34)		Teachers (N=66)	
	Illustrating statements	No. of state-ments	Illustrating statements	No. of state-ments
Sex	"different people"; "a girl – a boy"; "various physical and hormone processes taking place in our bodies"	13	"the man's peculiarity which is formed even before the man is born and is identified upon birth according to external sex organs although external gender does not always correspond to psychological"; "the woman's, man's physical, mental sex peculiarities"; "attraction to the opposite sex".	16
Gender	"this is the word indicating not only the sex but also determining the man's actions, behaviour, etc."; "gender is part of the man's active main need to love and be loved. It encompasses a number of emotions, ideas and expressions (such as touch, hug, taking each other by hands)"; "gender is reflected in toys, bought to everyone since the early years and clothes, conversations".	15	"this is people's attitude to themselves as a man or a woman, attitude to the partner, behaviour in married life, relations with people of the opposite sex"; "this is sexual identity"; "this is conceptions "I am a girl, I am a boy", formed since the early years" , "knowledge about a person's hygiene, body composition, anatomy of sex organs, physiology, concepts of morality and virginity, love, respect, responsibility, family, sexual relations, diseases, etc."	47
Mani-festa-tion of sexua-lity	"this is a touch of certain places of others"; "gender is attraction of love without words".	2		

Many teachers emphasise gender as *sexual identity* ("understanding oneself as a representative of sex", "attitude to oneself as to a man or woman, maybe even sexual orientation"), *communication between sexes* ("the way to make a contact with another person and open up to him/her", "sex relations between people of both sexes, a person's behaviour and decisions made by people of both sexes", "attitude to the partner, behaviour in married life, relationships with people of the opposite sex"), *value orientation* ("the person's values, beliefs", "perception of values", "sex related values, attitudes, beliefs", "moral attitude to sexual life"), *influence of education on gender formation* ("conceptions formed from early years "I am a girl, I am a boy", "these are knowledge about a person's hygiene, body composition, anatomy of sex organs, physiology, concepts of morality, virginity, love, respect, responsibility, family, sexual relations, diseases, etc."); however, for some of them gender education is "one of the most complicated upbringing problems".

Conducting the research, the category **manifestation of sexuality** was also distinguished: several parents/foster parents stated that "gender was attraction of love without words" and "this was a touch of certain places of others", and one of the teachers emphasised that this was "attraction to the opposite sex".

Interpretation of the Conception of Sexuality in the Environment of Adolescents with Mild Intellectual Disabilities

The research disclosed the informants' subjective attitude to the conception of sexuality, its representations, which are often identified with gender.

Describing the concept "sexuality", parents/foster parents pay much attention (see Table 2) *to the role of appearance and clothing in sexuality* ("sexuality means tidy appearance, clothing, manners, hairstyle", "we start sexuality from clothing, appearance, these are the first steps to adolescence and talks about different sexes", "maybe when one wants to emphasise womanliness (manliness)", "the way the person looks"), *to the role of desire in sexuality* ("the wish to attract the opposite gender", "the form of attracting love, liking", "what arouses sexual attraction", "the man's wishes and feelings to "want" another person and feel that person"), *to manifestation of sexuality in sexual life* ("the degree to which that sex is needed"). However, some parents associate sex with destructiveness ("open demonstration of certain places").

Table 2. Interpretation of Parents'/Foster Parents' Conception of Sexuality in the Environment of Adolescents with Mild Intellectual Disabilities (N=34)

Categories	Illustrating statements	No. of statements
The role of appearance and clothing in sexuality	"sexuality means tidy appearance, clothing, manners, hairstyle", "we start sexuality from clothing, appearance, these are the first steps to adolescence and talks about different sexes", "maybe when one wants to emphasise womanliness (manliness)", "this is the way the man looks", "open demonstration of certain places".	10
The role of desire in sexuality	"the wish to attract the opposite sex", "the form of attracting love, liking", "what arouses sexual attraction", "the man's wishes and feelings to "want" another person and feel that person".	9
Manifestation of sexuality in sexual life	"the degree to which that sex is needed", "a certain feeling related to sexual life of opposite sex persons".	6

Speaking about sexuality, teachers mentioned (see Table 3) that sexuality could manifest itself in *appearance and clothing* ("emphasis of one's (as a person's belonging to a certain sex) certain body places in clothing"), *behaviour demonstrating sexuality* ("smiles, the wish to attract attention of persons of the opposite sex to oneself", "manners, the ability to communicate with representatives of the opposite sex, tempt", "behavioural manners (glances, smiles)"), *manifestation of sexuality in sexual life* ("feelings related to sex and sexual life", "sexual attraction – moderate desire", "attraction to the opposite sex, hormone storms, difficult to explain", "difficult to explain, you have to feel, for example, shining eyes").

Table 3. Manifestation of Sexuality of Adolescents with Mild Intellectual Disabilities: Teachers' Attitude (N=66)

Categories	Illustrating statements	No. of state-ments
Appearance and clothing	"emphasis of one's (as a person's belonging to a certain sex) certain body places in clothing", "<...> shining eyes", "appeal, attractiveness, temperamental nature", "the ability to single out not by clothes but by general appearance, glance, posture, etc.", "this is a feature that may be inborn (e.g., body shapes, glance, etc.) and acquired (clothing, manners, etc.) in order to attract opposite sex persons".	22
Behaviour demonstrating sexuality	"<...> behaviour manners (glances, smiles); the wish to attract attention of the opposite sex to oneself", "<...> behaviour with representatives of a certain sex, behaviour in public space", " these are feelings related to sex and sexual life, intimacy and behaviour among people, love, attraction".	31
Manifestation of sexuality in sexual life	"sexual attraction – moderate desire", "the man's and woman's sexual attraction, which can be aroused by the outer appearance of the man, a certain trait, spiritual qualities", "to the degree to which that sex is necessary", "a huge wish to experience the desired physical satisfaction", "hormone activities", "treatment of gender in the analytical physiological sense"	28

It was noticed during the research that parents and teachers who took part in education of adolescents with mild intellectual disorders paid considerable attention to the role of appearance and clothing in demonstration of sexuality and to manifestation of sexuality in sexual life. However, teachers more often observe manifestations of sexuality in behaviour, whilst parents/foster parents, in the role of the sexual desire in sexuality.

Family Planning and Fertility of Adolescents with Mild Intellectual Disabilities from Parents'/Foster Parents' and Teachers' Standpoint

Manifestation of gender of pupils with intellectual disabilities through relationships between sexes and family planning are among the aspects that are important for the disabled pupil's successful integration in the society. Richards, Watson, Monger, & Rogers (2012), Giedraitienė & Vaičekauskaitė (2002) note that these pupils' rights to sexual life are often breached. Family members' and social workers' attitudes become the key factor determining manifestation of the disabled pupil's gender in relationships (Rogers, 2009, 2010). It is important to note that countries ratifying The UN Convention on the Rights of Persons with Disabilities (2010) commit to take efficient and corresponding measures so that disabled people are not discriminated because of the disability entering into marriage, creating a family, committing to parenthood and can responsibly make decisions about the number of children and their birth periods, get information about reproduction and family planning and are given the means enabling them to use these rights. The disabled including children like other persons have the right to retain their fertility.

Analysing parents'/foster parents' expectations regarding family planning of pupils with intellectual disabilities, it was noticed that many parents *did not speak* with children *about the future family* but were inclined to talk to children about *mutual understanding in the family, love, respect/self-respect, responsibility, duty,* they *highlighted the man's role* and *emphasised*

Table 4. Parents'/Foster Parents' Expectations regarding Family Planning of Pupils with Mild Intellectual Disabilities (N=34)

Categories	Illustrating statements	No. of statements
Do not speak about the future family	"we don't speak about that", "honestly, we still haven't talked about that"	17
Mutual understanding in the family	"there should be mutual understanding in the family, people have to communicate a lot, have the same hobbies", "tolerance, if mistakes are made, calm talks and explanations about relationships", "so that there is concord and comprehension", "mutual understanding", "understanding <...>, care", "you need to understand each other, be able to explain", "<...> understanding, goodness", "so that they don't get angry on each other", "it is most important to listen to each other, solve problems peacefully, say strict no to violence", "however, children leave a care home without an appropriate example of a family model", "mutual behaviour, what mistakes are made, why rows most often occur, how to avoid them", "that it is necessary to get to know the friend and his family as close as possible"	13
Mutual support in the family	"to help to do housework, household chores", "that there will be <...> common work, children's upbringing", "that family is not sex in bed but every kind of support for the wife", "I say that you must help a lot doing works in the family", "help to each other in various household chores", "help, friendship <...>"	6
Love in the family	"that they will love each other, have kids, who will bring happiness and whom they will love", "that it will be necessary to love and respect one's wife", "that there has to be love", "love, fidelity", "about the man's and woman's love to each other, communication, behaviour <...>"	5
Respect/self-respect in the family	"That there should be <...> respect, <...>", "respect, trust in each other", "that the woman first of all should respect herself", "self-respect"	5
Responsibility in the family	"<...> responsibility", "<...> and accountability"	5
Duty in the family	"the duty to the family, at work <...>", "about their duties in the family, <...>"	3
Emphasis on the man's role	***The man who does not have harmful habits*** "so that he isn't like his parents (vices)" "so that the future husband is decent, doesn't have harmful habits, is mindful, helpful" "so that he doesn't drink, fight" "so that he is good, doesn't drink, doesn't smoke, " "so that he is honest, without harmful habits. <...>"	5
	The man as wage-earner "about the man who has to earn money to maintain a family <...>", "to get a good husband who would earn much money", "<...> take care of the family (man)"	3

career (see Table 4). However, several parents stress that the most effective preparation for family is *teaching by one's own example* ("it is best if the child sees how his/her mother and father behave", "<...> we don't speak. Children see parents' communication and this is enough"). It is obvious that parents/foster parents of pupils with mild intellectual disabilities have positive expectations to family planning of these pupils, pay particularly much attention to the importance of *mutual understanding in the family;* in their opinion, this is one of the key aspects of successful family planning.

Parents/foster parents also reflected expectations regarding *the man's role* in family life ("the man without harmful habits", "the man the wage-earner"). These statements highlighted a stereotypical attitude to the role of the man as the head of the family, which is still tenacious in the society, and this quite visibly demonstrated that often children with intellectual disorders come to educational institutions from social risk or asocial families. Analysing interview data, parents'/foster parents' phenomenal attitude (category *emphasis on career*) to family planning of the adolescent with mild intellectual disabilities was found out ("so that this man appears in life as late as possible because the most important thing is studies, good job, and family can wait"). This phenomenon reflects the attitude that parents find the adolescent's disability not important, he/she is treated as a person who is successfully seeking education and career and plans the family only having reached the status in the society.

Table 5. Teachers' Expectations regarding Family Planning of Pupils with Mild Intellectual Disabilities (N=66)

Categories	Illustrating statements	No. of state-ments
Negative attitude to family creation	"<...> negative attitude. Such pupils create families with pupils similar to them and have children with still bigger disabilities", "act sexually irresponsibly, don't plan pregnancy, don't think about consequences", "being immature personalities themselves, they won't bring up their children", "don't respect a partner, that is why don't use contraception, often conceive", "<...> I have already worked at school for 35 years. I bring up children of former pupils. It means these pupils create families, give birth to children who again have intellectual disabilities, sometimes even bigger", "there are more disabled newborns", "fertility of such pupils is undesirable, the nation degenerates", "don't plan the family, accidental sexual relations, often give birth for benefits", "practice is that the bigger the intellectual disability, the more children in the family", "it would be better if these disabled people were sterilised", "<...> in my opinion children's number in the family should be limited"	19
The need of education	"they must be familiarised with contraception but this must be done in a subtle way, individually", "to control, give knowledge on these issues, help to solve arising problems", "I think they need big support when they have offsprings", "it depends on the severity of the disability", "it is necessary to familiarise with contraception", "could be moderately controlled", "risk factors must be considered", "it would be best of course if one of the parents were healthy"	7
Declaring the right to the family	"have the right to all human relationships", "let give birth", "I think that girls or boys can create families and give birth to children", "this is every person's right", "every person's right and choice"	6
Successful cases planning a family	"practice shows that a share of pupils successfully created families, raise children"	3

A slightly different attitude to fertility of pupils with mild intellectual disabilities was reflected in teachers' answers (see Table 5). Many of them expressed *a negative attitude to family creation.* However, there are teachers who are not so categorical and maintain that pupils *need support planning a family*. Other teachers declared that persons with intellectual disabilities *had the right to the family* ("the disabled have the right to all human relationships", "they have the right to fertility", that is why "they have to be allowed to give birth"), several of them even shared their ideas that "practice showed that a share of pupils had successfully created families, raised children".

It has to be noticed that *not so positive expectations to disabled persons' family planning* dominate in educational institutions; i.e., conducting the research, teachers' *negative attitude to family planning* visibly singled out. However, perceiving that *the disabled have the right to the family,* child birth, informants indicated *the need of education creating a family* and also when it is created.

Conducting a research, burning issues related to family planning of pupils with intellectual disabilities, which are gingerly analysed in today's society, were noticed. A considerable share of parents/foster parents even do not dare to speak with children about the future family and many teachers express their negative attitude to family planning of pupils with mild intellectual disabilities. This can be influenced by a clinical attitude to education of these children, which was dominating for a long time, emphasising the type of disability and methods of its elimination but not seeking to integrate a disabled pupil in social environment, society. However, it must be noted that there is also another dominating opinion of the informants about family planning of these pupils in the context of sexuality and gender. Teachers note that these pupils must receive support creating mutual family relationships while parents/foster parents seek to convey aspects of a successful marriage.

Conclusions

1. Analysing the conception of "gender" given by participants of the educational process (parents and teachers of adolescents with mild intellectual disabilities), three categories were distinguished: *sex, gender*, and *manifestation of sexuality.* Teachers more often describe gender as a social category rather than biological, whilst parents/foster parents speak about gender both as a biological and social phenomenon.

2. Describing the conception of "sexuality", parents/foster parents emphasised *the role of appearance and clothing in sexuality, the role of desire in sexuality, and manifestation of sexuality in sexual life.* Teachers associate "sexuality" with *appearance and clothing, behaviour demonstrating sexuality, manifestation of sexuality in sexual life.* Thus, parents and teachers who take part in education of adolescents with mild intellectual disabilities pay considerable attention in demonstration of sexuality to the role of appearance, clothing and manifestation of sexuality in sexual life. However, teachers more often observe manifestations of sexuality in behaviour, whilst parents/foster parents, in the role of desire which manifests itself in sexuality.

3. Analysing parents'/foster parents' and pedagogues' approaches to family planning and fertility of adolescents with mild intellectual disabilities, it was noticed that many parents *did not speak about the future family* with children, the remaining share talked with children about: *mutual understanding in the family, mutual help in the family, love, respect/ self-respect, responsibility, duty, the man's model in the family, the importance of career.* Several accentuate that the most effective preparation for family is *teaching by one's own example.* Teachers' answers disclosed a slightly different attitude to fertility of adolescents

with mild intellectual disabilities. Many expressed their *negative attitude to creating a family,* others stated that there was an obvious *need of education,* declared these pupils' *right to the family,* while several pedagogues expressed their positive attitude to family planning, fertility of adolescents with mild intellectual disabilities, supplementing it with *successful cases planning a family*.

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PARENTS' AND TEACHERS' ATTITUDE TO FAMILY PLANNING OF ADOLESCENTS WITH MILD INTELLECTUAL DISABILITIES IN THE CONTEXT OF CONCEPTIONS OF GENDER AND SEXUALITY

Summary

Neringa Povilaitienė, Liuda Radzevičienė
Šiauliai University, Lithuania

The process of (self-)development of gender identity encompasses formation of men's and women's roles, comprehension of cultural norms (social function), and formation of perception of oneself as a representative of a certain sex and of behaviour according to norms and roles accepted in the society (psychological function). This process is called socialisation, during which the person takes over culture norms, develops his/her potential and becomes a full-rate member of the society (Martin& Ruble, 2004). According to Yvi (2012), the basis of socialisation is communication. Socialisation encompasses all life cycle, whilst gender identity is one of its aspects.

Gender development starts in the family already in the first year of life. The family is the only institution, which gives the first life experience, forms character traits and the conception of morality. Yvi (2012) accentuates that family is the most important factor without which the society would not be able to socialise a person in a full-rate manner. Therefore, seeking to successfully organise gender development and cooperation in pupils' socialisation process, it is relevant to find out how participants of the educational process (parents and teachers) treat the conceptions of "gender" and "sexuality" and the essential attitude to family planning and fertility of adolescents with mild intellectual disabilities.

Conducting this research, it was aimed to find out the attitude to family planning of the adolescent with mild intellectual disability in the context of concepts of gender and sexuality.

Describing the concept of "gender", parents/foster parents and teachers distinguished three categories: *sex*, *gender*, and *manifestation of sexuality.* However, teachers more often describe gender in a social rather than in a biological sense, whilst parents/foster parents split into two similar parts, and several of them identify sexuality with gender. As to sexuality, parents/foster parents focus on *appearance and clothing, desire, sexual life, reproduction function.* However, certain parents associate sexuality with destructiveness. In teachers' opinion sexuality is expressed by *clothing, behaviour, desire, sexual life.*

Conducting the research, parents/foster parents' and teachers' attitudes to family planning and fertility of adolescents with mild intellectual disabilities were distinguished. It was noticed that a considerable number of parents *did not speak* with children *about the future family* but others talk with children about: *mutual understanding in the family, mutual help in the family, love, respect/self-respect, responsibility, duty, the man's model in the family, the importance of career.* However, some parents emphasise that the most effective way of preparing for family is *teaching by one's own example.*

Analysing parents'/foster parents' interview data, phenomenal attitude (category *emphasis on career*) to family planning of the adolescent with mild intellectual disability was also found out ("so that this man appears in life as late as possible because the most important thing is studies, good job, and family can wait"). This phenomenon reflects the attitude that parents find the adolescent's disability not important, he/she is treated as a person who is successfully seeking education and career and plans the family only having reached the status in the society.

A slightly different attitude to fertility of pupils with mild intellectual disabilities was reflected in teachers' answers. Many of them expressed *a negative attitude to fertility,* others stated that there was *a need of support planning the family.* Several teachers noted that "the disabled had the right to all human relationships", "they had the right to fertility", that is why "they have to be allowed to give birth"; several of them even shared their ideas that "practice showed that a share of pupils had successfully created families, raised children".

LEADERSHIP PRACTICES THAT SUPPORT DIVERSE LEARNERS FROM EARLY CHILDHOOD THROUGH ADULTHOOD

Harvey A. Rude, Rashida Banerjee
University of Northern Colorado, USA

Abstract

This article addresses the components of leadership and the effective demonstration of leadership behavior that supports strong systems of social welfare from an interdisciplinary perspective. The applications of evidence-based leadership principles are embedded within the context of systems that address the needs of all learners from early childhood through adulthood. Leadership considerations include values-based practice, effective use of data, and team learning for systems improvement.

Key words: *leadership; team learning; adaptive challenges; organizational change; evidence-based leadership; transformational leadership.*

Leadership practices that support diverse learners from early childhood through adulthood

The challenge of providing leadership for the purposes of initiating, developing, and maintaining excellent educational services and supports to diverse learners can be a difficult proposition for professionals in the disciplines of social welfare and education. This ongoing dilemma for human service professionals has been described in a variety of contexts as a call for leadership without easy answers (Heifetz, Grashow, & Linksky, 2009). The difficulty of engaging adults in a collaborative attitude to effect positive changes in the education of diverse learners can seem like herding cats, or in another cultural context, bringing together vast numbers of "free range" camels roaming across the desert landscape into a coherent and focused team that can work together to achieve a common purpose.

The difficult work of building the capacity and independent capabilities of learners begins at an early age, and is compounded by the temptation to provide too much support, which makes it difficult to foster independence, self-regulation, and self-determination for young learners (Milteniene & Venclovaite, 2012). As a single parent of four children, including a nine year-old and four year-old triplets, I frequently felt overwhelmed at the amount of time required to support children in learning independence and self-reliance in everyday tasks. The statement that accompanies this challenge can be synthesized in the following words: "I would have finished this by now, but I had help." This simple statement resonates for any individual within a human service organization who endeavors to provide leadership that builds capacity and self-reliance in pursuit of enhance outcomes, learning, and results for clients. These young people (my children) eventually developed into competent and self-determined human service professionals who are highly effective in their professional roles as teachers and clinical counselors.

Evidence-based leadership practices

Scientific problem: Two questions that have challenged scholars over the course of centuries are the basic concerns for: "What is leadership?" and, "What does it mean to effectively demonstrate leadership?" In the professional literature devoted to the study of leadership, there are more than 100 distinct definitions of leadership (Antonakis, Cianciolo, & Sternberg, 2004; Bass, 1990; Conger & Riggio, 2007; Rost, 1991). Leadership is a complex and multi-faceted phenomenon. The investigation of evidence-based practices that support effective leadership has significant promise for positive changes in human services from a variety of cultural and global perspectives (House, Hanges, Javidan, Dorfman, & Gupta, 2004).

Aim of the research: The purpose of this article is to summarize the evidence-based components of leadership and the effective demonstration of leadership behavior. The implications of this line of inquiry have significant implications for the effectiveness of organizations that promote social welfare from an interdisciplinary perspective.

Methodology used: The conceptual foundation for leadership is drawn from the extensive theoretical literature on the topic that has evolved through the study of leadership through different disciplinary perspectives including: "anthropology, business administration, educational administration, history, military science, nursing administration, organizational behavior, philosophy, political science, public administration, psychology, sociology, and theology" (Rost, 1991, p. 45). The conceptual framework that guides the adaptive leadership model is based on earlier conceptions that defined leadership from different perspectives that include: (1) traits or innate qualities of individuals as leaders; (2) behavioral approaches that focus on task and relationship behaviors in the organizational setting; (3) situational approaches that consider the match between the leader's style and specific situational variables; (4) relational approaches that examine the nature of relations between leaders and followers; (5) transformational or "new leadership" approaches that describe a process that changes people and organizations; and (6) emerging leadership approaches that consider dimensions of authenticity, spirituality, servant leadership, and cultural/global perspectives on leadership (Northouse, 2012, p. 2).

The applications of transformational and emerging paradigms of leadership provide a synthesis of how leaders and the demonstration of effective leadership are defined. The collection of evidence-based practices in leadership is summarized through examples of high performance teams, implementation science, and culturally responsive leadership. The definition of successful outcomes from effective leadership is demonstrated through attention to documented results and learning that provide tangible benefits to children and families who are involved in social welfare systems (Anttila & Rude, 2011).

Values in leadership

Leadership in absence of identified values that guide the application of knowledge and skills is untenable for a variety of reasons. The early trait theorists in the era of scientific management posited that some individuals are born to be leaders, while the vast majority would be subscribed to roles as followers in a given organizational context. The great men theories of Thomas Carlyle (1888) run counter to the prevailing approaches that surmised such great men are the products of their societies, and that their actions would be impossible without the social conditions built before their lifetimes (Spencer, 1896). The key issue that emerges from this conversation about whether the person makes the event, or the contextual event makes the person, is the question of whether power and position have intrinsic worth. The challenge of leadership is to demonstrate the necessary courage, commitment, and skill to apply what is needed to effect the necessary changes to move people in new directions. History

is replete with examples of leaders who acted on values and beliefs that did not support the best interests of all people.

The effective exercise of leadership includes a combination of both position power and individual influence. Burns (2003) identified the tenets of transformational leadership that are based on 00shared values for the pursuit of life, liberty, and happiness for all members of a society. The station that is provided to leaders by virtue of title, authority, position power, or other tangible factors that permit individuals to direct the actions of others are complemented by the influence that can be exerted by the accomplishments and expert power that results from demonstrated competence. Within the dynamic of station and influence, there is always a choice regarding whether to lead or mislead, that is to say acting on the values that support children and families through the ability to transform the conditions that can be changed to achieve a more beneficial outcome. A transformational approach to leadership does not rely on the simple transactions that are found in a "quid pro quo" dynamic that expects a mutual exchange of items deemed to have value. The concept of transformational leadership is often based on resolving conflicts through the creative ability to generate alternative perspectives and points of view (Lencioni, 2002). The major responsibility of leaders who ascribe to this paradigm is to mobilize people to tackle tough problems that would otherwise be avoided. The initial focus within such a dynamic is to provide different avenues for engagement in a difficult situation that ultimately leads to a level of empowerment where organizational members can exert their own leadership to achieve new learning and results.

Kukic and Rude (2013) define effective leaders and the exercise of effective leadership in terms of the capacity to demonstrate: (1) integrity; (2) authenticity; (3) a commitment to something larger than oneself; and (4) the ability to become cause in the matter. A brief explanation of these four foundational pillars of effective leadership illustrates the importance of values in leadership.

Conceptual foundations of leadership. A viable conceptual foundation of leadership is based on the contextualized nature of being a leader and exercising leadership in a manner that is effective (Erhard & Jensen, 2012). These contexts include the view of leader and leadership on four major dimensions including linguistic abstractions (i.e., the realm of possibility), phenomena (i.e., what one observes or is impacted by), concepts (i.e., different domains for the demonstration of leadership), and terms (i.e., specific definitions of both leader and leadership). Within these contexts, one of the most important ingredients for effective leadership is integrity, which is simply your word defined. This includes what you said, what you know, and what is expected of you. It would be easy to conclude that integrity in practice is best demonstrated by the golden rule of: "do unto others as you would have them do unto you." A world in which everyone followed the golden rule would be wonderful. However, the dilemma that emerges with this definition of integrity is that this rule of action leaves one with no power. Each individual is left depending on the good will of other to benefit personally.

The meaning of authenticity in leadership is being and acting consistent with who you hold yourself out to be for others, including who you allow others to hold you to be, and who you hold yourself to be for yourself. While this is fairly obvious, what is very much less obvious is the path to authenticity. Lencioni (2012) points out how the path to authenticity is being authentic about those occasions when you are not being authentic. The ability to detect inauthenticity in one's own behaviors is a key to effective leadership.

Being committed to something bigger than oneself is more than altruism. Those who commit to accomplishing something that provides a societal benefit or promotes conditions of well-being for significant groups of citizens derive a source of serene passion required to lead and to develop others as leaders (Hall & Hord, 2006). This becomes a source of persistence that makes it difficult to deviate from commitments when the path to accomplishment gets

tough. A key question that arises in this context is: "Are you committed to being bigger than the way you wound up being?" In other words, what is your purpose in life, and what is the purpose of your career or relationships?

Being cause in the matter means everything in your life as a stand that you take for yourself and life, and acting on the basis of that stance. Effective leaders are accountable, and take full responsibility for their actions and lack of action. In this sense, leaders have significant power that avoids the trap of becoming a victim. Victims have no power, and someone who chooses to be cause in the matter cannot be a victim. Cause in the matter is a context I give to myself to be effective as a leader and the effective exercise of leadership. It is not about the content of a given situation.

Kukic and Rude (2013) determine the ethical application of these four conceptual foundations that result in the ontology of being a successful leader and the phenomenology of doing leadership in an effective approach that produces significant outcomes, learning, and results. The critical consideration to be observed for both dimensions is the identification of the priorities for action that become the basis for ongoing work to achieve better outcomes. The most important priorities are often difficult to define and address through existing approaches, which underscores the importance of leaders in defining the nature of adaptive work in organizations.

Differences between adaptive and technical work

The comparisons between biological evolution and the evolutionary change of successful organizations have common points of reference. A species will change as the genetic program changes to adapt to changing conditions and demands. Heifitz and Linsky (2002) found that an organization is bound by cultural mores and values that seek equilibrium to maintain the sense of security that is bounded by "the way we do things around here". The manner in which cultures change is through new learning, that is frequently expressed by recognition that individuals are not satisfied with the status quo, and are open to the consideration of new learning that leads to personal change and commitment. The key questions to be raised in adaptive work are: "What is it we are adapting to become?" and "For what purpose are we adapting?"

The concept of authority in leadership is distinctly different from influence. The ability to influence the worldview of organizational members is not restricted to those who hold official positions of power and authority. The ability of leaders to exercise influence on the members of an organization are based on the ability to assess current realities and clarify the values that maintain a set of practices, knowledge bases, or attitudes. The task of leadership in addressing adaptive work is to develop a creative tension regarding what currently exists (i.e., the confrontation of brutal facts and realities that define the current conditions and practices) in comparison to the assessment of what could be created to define the ideal future for the organization and the individuals it serves. Thomas Kuhn (1962), in his classic work on the structure of scientific revolutions, espoused the difficulties involved in moving away from established practice, even when the evidence is clear that existing practice is not producing the expected results. There will never be enough data, evidence, research, or proof that will convince others to commit to a created future. The reason for committing to the created future is based on the realization that the default future has failed to make the organization, system, or individual complete.

Heifetz, Grashow, and Linsky (2009) have found it helpful to understand the concept of adaptive work in comparison to the more widely understood concept of technical work. Technical work is easy to understand through a set of clearly defined problems, accompanying solutions, and responsibility for implementation typically assigned to a responsible leader with

the appropriate authority to accomplish a resolution to the problem. In contrast, adaptive work typically does not have well defined problems or solutions. The process of defining a problem requires new learning on the part of organizational members, as does the generation of a workable solution to address the identified problem. These problems of practice are commonly referred to as adaptive challenges rather than technical problems. The responsibility for creating the conditions to support new learning to define the adaptive challenge and generate potential solutions expects greater responsibility on the part of all stakeholders who are impacted by the adaptive challenge. In this scenario, the responsibility for resolution is not the purview of the authority figure within an organization, but rather shared in a distributive context with those who have the greatest influence impact others through relationships and creating the conditions for new learning to occur.

Adaptive work requires a significant longer timeframe to identify the nature of the problem, the potential solutions that can address the concern, and the commitment to action in comparison to technical work. Adaptive work is frequently couched in terms of experimental work that requires attention to implementation science (Fixsen, Blase, Duda, Naoom, & Van Dyke, 2011). Adaptive challenges typically generate disequilibrium and avoidance on the part of organizational members. This calls for leaders who are comfortable with the symptoms of conflict that define the dimensions of an adaptive challenge.

Four distinct dimensions that highlight the differences between technical and adaptive work include direction, protection, conflict, and norms. There are situations that require attention to technical work and adaptive work, depending on the role of the leader. When the focus for leadership is concerned with determining the direction to be pursued, technical approaches highlight the need to define the problem and solution, while adaptive approaches are concerned with framing issues and posing key questions. When considering the need for protection, technical problem orientations seek to protect organizational members from external threats, while adaptive challenge focused leadership seeks to disclose the external threat to mobilize action. The inevitable conflicts that arise within organizations are concerned with restoring order in the technical paradigm, while adaptive leadership is concerned with exposing the conflict and allowing it to fully emerge. Table 1 provides a comparison of leadership behaviors from a technical and adaptive leadership approach.

Table 1. Considerations from technical and adaptive leadership

Area of focus	Technical leadership	Adaptive leadership
Direction	Provide both the definition of the problem and the solution to that problem.	Frame the issues for consideration by group members and identify key questions for consideration.
Protection	Protect organizational members from external threats.	Disclose the external threats and inform organizational members about the challenges.
Conflict	Restore order and protect individuals from conflict.	Expose conflicts and encourage individuals to confront the resulting adaptive challenges.
Norms	Maintain commitment to operational norms and agreements.	Allow challenge to norms to occur and support challenge within the organization.

Finally, the operating norms within a technical model focus on maintenance of bureaucracy, while adaptive leadership seeks to challenge existing norms and channel the resulting challenge into a more responsive system. The classic error that is most frequently identified is the tendency to treat adaptive challenges as if they were technical problems. For example, educators who are expected to develop new skills in the role of effective coaches for their colleagues may rely on what is already known about teaching young learners and not consider the benefits of adult education as an essential new learning. To avoid this dilemma, it is critical to consider the purpose of leadership as mobilizing stakeholders to become engaged in adaptive work. Leadership is an activity, with or without authority, not defined by personality traits, power, influence, or position.

High performance teams

The notion of distributive leadership that supports the capacity of professionals concerned with the social welfare of all citizens, including those with the most challenging circumstance or disabilities, has great potential to create and sustain high performance teams. Wheelan (2010) identified the benefits of such efforts. Team norms encourage high performance and quality. The team expects to be successful. The team encourages innovation. The team pays attention to the details of the work. This supports the values-based goals of transformation that departs from more traditional organizational arrangements that tend to fragment individuals into separate goals, perceived roles, and points of view.

The key to transformation of organizational culture takes on the fervent emphasis of an extreme makeover of existing practices. High performing teams move from a culture of separate work to one that is focused on shared work. Communication evolves from a locus of communicating personal interests to communicating how personal interests are an important part of the total pictures. This encourages human service professionals to move beyond a focus of talking and working with others in the same role, to routine interactions with others who do shared work. Nutt (2002) views the ultimate benefit of this transformation as moving from the definition of social welfare organizations and stakeholders as adversaries, to a systemic orientation that supports these organizations and stakeholders as allies. Any organization concerned with advancing the work of social welfare benefits from this broad-based orientation.

Perhaps the most critical skill that high performance team members can develop is the ability to practice dialogue in daily practice, and differentiate this communication skill from the more typical institutional focus on discussion or debate. The concept of dialogue, or shared meaning in conversation, has the potential to raise the collective intelligence of any group. Heisenberg (1971) provided groundbreaking work arguing that all science is rooted in conversations. While debate accepts assumptions as truth and discussion surfaces various assumptions, dialogue examines assumptions so that meaning moves through the group. While debate typically engenders point/counterpoint exchanges and discussion relies on the will of the majority where it is possible to agree to disagree, dialogue seeks common ground and supports consensus. Finally, while debate is concerned with being persuasive and discussion is informative, dialogue has the larger goal of encouraging reflection and the ability to engage in team learning.

Senge (1990) reminds us that team learning does not require individual team members to practice one way of thinking about issues. The ongoing practice of dialogue actually encourages individual communication styles that enhance the overall impact of dialogue in effective teams. Parker (2008) identified four essential team player styles that are complementary to the success of team learning and higher performing teams including the challenger, the contributor, the communicator, and the collaborator. The challenger style is question oriented, asks the tough questions, and pushes teams to take reasonable risks. The contributor is task

oriented, and gets the team to focus on the immediate task. The communicator is more process oriented, and seeks to support interpersonal relationships and group process effectiveness. The collaborator is goal oriented, and emphasizes the overall purpose of the team. These four distinct and complementary approaches to team learning support the impact and effectiveness of high performance teams.

Leadership as moral imperative for effective organizations. Fullan (2011) has studied the critical nature of leadership as a moral imperative that becomes the strategy for improving schools and other human service organizations. To be successful in this arena, effective leaders have six major responsibilities in pursuit of this objective including: (a) make a personal commitment; (b) build relationships; (c) focus on implementation; (d) develop the collaborative; (e) connect to the outside; and (f) be relentless to divert the distractors. A personal commitment is essential to support, activate, extract, and galvanize a moral commitment from teachers and other human service providers. Building relationships requires that leaders lead with respect, even before people have earned it. A focus on implementation assures focus, monitoring in relation to the focus, and displaying a strong sense of efficacy. Developing the collaborative can be accomplished through promotion of learning communities that build the collective capacity of systems, since leaders with moral purpose don't do it alone. Connecting to the outside is essential to have sufficient infrastructure across larger systems and communities. The final ingredient, being relentless to divert distractors, leads to increased focus and coherence of efforts, which leads to more effective outcomes, learning, and results for clients who are the beneficiaries of social welfare systems.

A tangible example of the moral imperative in action is represented through the Diné Education Philosophy that promotes thinking, planning, accomplishing, and reflecting. Begaye (2006) illustrates the importance of maintaining a focus on these aspects of indigenous culture to maintain identity while confronting the inevitable adaptations to social, political, and economic challenges. The key definitions of Diné Education Philosophy are represented in Figure 1 through the corresponding Navajo words of Nitsahakees, Nahat'a, Iina, and Sihasin. The ongoing attention to these learning principles provides a strong foundation for effective leadership in diverse cultural and linguistic contexts. The shrinking of the world through technological advances and the influences of cross-cultural communication provides greater incentives to address the study of global and cultural perspectives on leadership. The Diné Education Philosophy provides a strong sense of purpose and spirituality from a Native American educational point of view, while offering the benefits of a strategic planning process tool from a Western educational application. The ability to acknowledge the strengths and unique perspectives of these two cultural contexts leads to a balanced leadership in support of the moral imperative.
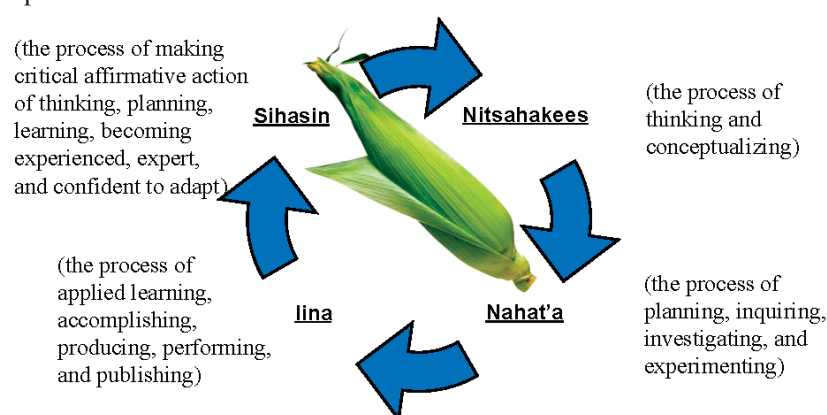

Figure 1. Dine Education Philosophy

Within the context of leadership as a moral imperative, a guiding set of ideals is offered for consideration. Leaders of systemic improvements adhere to the basic premise that all children can learn, including the most disadvantaged and challenged among us. A small number of key priorities will ensure a clear and concise focus on effectiveness. Resolute leadership is represented by individuals who stay on message, and do not get distracted by the chaos of rough periods found in daily events. The collective capacity refers to the complementary aspects of disciplined collaboration and the intriguing phenomenon of "collaborative competition." The ability to identify strategies with precision enhances the speed of quality change for transformation of human service organizations concerned with human welfare (Fixsen et al., 2005). The failure to develop effective accountability approaches plagues all human service organizations, and is best addressed through intelligent accountability systems that will be described in greater detail. Finally, all does mean all. Gay (2000) documented the impact of ineffective leadership through piecemeal efforts, and how most successful efforts do not exclude, but rather practice and promote inclusivity.

Intelligent accountability is a relatively new phenomenon as advanced by Fullan (2010). The key to success in intelligent accountability is to rely on incentives more than punishment. An organization that invests in capacity building so that people can meet goals is being intelligent with accountability. The focus of these efforts is invested in collective or internal accountability. When interventions are required to maintain focus, these efforts are initially implemented in a nonjudgmental manner. The impact of intelligent accountability embraces transparent data and practices to ensure common understanding of results. Lastly, intelligent accountability advocates intervene more decisively when required.

Leadership applications to organizations concerned with social welfare

The demonstrated impact of leadership relies on a relentless commitment to assessing current realities in organizations that serve the needs of individuals within the variety of human service and social welfare systems. This provides significant support to avoid the unintended outcomes of various human service systems. Some examples of unintended consequences of special education programs and services include the following: increased dropout rates, the differential status of various high school diplomas, limited employment opportunities, the school to prison pipeline, the problem of over-representation of students from different cultural backgrounds in special education, and the lack of attention to the specific needs of college students with disabilities (Valle & Conner, 2011).

The cross-cultural benefits to leadership are represented through the applications of transformational leadership for Native American educators who seek to provide leadership within tribal communities in the United States. Rude and Omdal (2009) describe a model of Native American leadership that embraces the necessary balance between Western and Native traditional practices that are inherently confronted with conflict that requires appropriate attention to adaptations in practices that impact values, beliefs, norms, culture, and language. The continuum of adaptation includes the Native American focus on the duality of Mother Earth and Father Sky (e.g., Mother Earth refers to the "blessing way" nurturing aspects of support, while Father Sky emphasizes the protection way aspects of structure), Hozho which is the Diné (i.e., Navajo Nation tribe) concept of blessing way teachings. The predominate Western values are expressed through negotiation and compromise, while the middle ground in the balanced model of Native American leadership seeks harmony and balance within the system.

Practical considerations of leadership for schools and human service professionals can best be seen through ongoing expectations for positive school climate and a focus on results that includes verifiable data. Positive school climate can be measured through the efforts to engage teachers in collaborative team processes that use data to guide instruction (Kaffemaniene & Jureviciene, 2012). It is imperative to include families in a culturally sensitive, solution focused

approach to support student learning. An essential practice that supports positive school climate is defining and consistently teaching expectations of behavior for students, parents, and educators. The ability to acknowledge and recognize students and adults consistently for appropriate behaviors leads directly to a positive, generative, and powerful school climate. It is essential to monitor, correct, and when necessary re-teach appropriate behaviors when behavioral anomalies are identified.

Deshler and Cornett (2012) conclude that the impact of leadership practices must be documented through reliable and valid systems of data to ensure accountability. The role of leader in facilitating data discussions is the engine that drives the enterprise of professional learning communities. A variety of strategies can be employed to achieve this purpose, including data dialogue meetings, grade or content level meetings within individual schools, and conducting meetings that are efficient, organized, and scheduled on a regular basis. The data discussions can be sustained through considering whole group adjustments in practice, flexible group *changes*, or class changes at the secondary school level. Another target is the identification of curricular gaps based on systematic review of class benchmarks or other data.

Conclusion and future directions

In conclusion, the emphasis on effective and evidence-based leadership practice adds significant value to the complex challenge of interdisciplinary approaches for social welfare systems. The challenge of transformational leadership addresses the complexity of systems change from a variety of perspectives. As you travel this road, perhaps the road less traveled, consider the impact of leadership that is best characterized through the complexity of organizational and systemic change. Leaders can act on behalf of positive or negative outcomes in this enterprise. The challenge for the future is to select the guiding values that will make a positive difference in the lives of children, families, educators, and other human service providers that strive to actively promote the state of human welfare on a global scale.

The ability to apply these key components within social welfare systems hinges to the greatest extent on the ability to demonstrate commitment to change as a person, a human service provider, and a leader of innovation in multiple contexts. Change leaders are models of integrity and authenticity in their daily roles and responsibilities. These critical qualities provide the impetus to ensure that ethical leaders are committed to developing a created future that is clearly about something bigger than position, title, prestige, salary, or other aspects of self-consideration. Successful leaders get to the future first, and find the means to bring their organizational colleagues to new commitments and levels of growth and impact where they would not go on their own. Safe travels to you as you pursue the exciting, unpredictable, and highly rewarding journey of organizational change and growth.

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LEADERSHIP PRACTICES THAT SUPPORT DIVERSE LEARNERS FROM EARLY CHILDHOOD THROUGH ADULTHOOD

Summary

Harvey A. Rude, Rashida Banerjee
University of Northern Colorado, USA

One of the most important considerations to be addressed in the provision of effective social welfare services to persons from diverse cultural, linguistic, and economic backgrounds is the provision of effective leadership. While researchers have consistently articulated the importance of leadership, the definition of what it means to be a leader and effectively demonstrate leadership has more than 100 different conceptualizations that are documented in the research literature. The determination of what it means to be a leader and to effectively demonstrate leadership is of critical importance to social welfare agencies that seek to make a positive difference in the lives of individuals across the life span. This issue has been investigated by scholars over the course of centuries, and assumes a greater degree of importance in the context of an evolving global and multi-cultural society. The current investigation summarized the evidence-based components of leadership and the effective demonstration of leadership behavior. This supports the success of organizations that promote social welfare from an interdisciplinary perspective.

This article identifies a conceptual framework for leadership that illustrates the importance of being a leader (i.e., an ontological perspective) and effectively demonstrating leadership in multiple contexts (i.e., a phenomenological perspective). These elements include: integrity, authenticity, commitment to something larger than self, and ability to be a cause in the matter or outcome. The evidence of effective leadership is provided through the determination of outcome measures that directly address results and learning, including the following: (1) the determination of adaptive leadership that creates new understanding of adaptive challenges, and builds the capacity of organizational members to pursue new directions and commitments for greater efficacy; (2) team learning strategies that promote and support the individual contributions of team members; (3) organizational outcomes that are measured through implementation science; and, (4) the impact of culturally responsive leadership from a global perspective must be documented through reliable and valid systems of data to ensure accountability.

The ultimate measure of an effective leader is the demonstrated ability to involve other members of an organization to commit to a created future those individuals would not choose to pursue on their own. The alternative to the created future is a default future, one that will be maintained through the bureaucratic influences of governmental and non-governmental agencies alike, that tends to preserve the status quo. The ability to create commitments to change at the personal, team, organizational, and systems levels of impact is critical to the demonstration of effective leadership that results in beneficial outcomes for clients within any human service system. Successful leaders create a vision of improved conditions and outcomes through a relentless commitment to organizational change, and inspire others to join this quest for sustained improvements with a goal of excellence for service providers and individuals who benefit from these services from early childhood through adulthood.

FAMILY FACTORS OF PERSON'S IDENTITY DEVELOPMENT DURING ADOLESCENCE AND EARLY ADULTHOOD

Tetiana Yablonska
Kostyuk Institute of Psychology of the
National Academy of Pedagogical Sciences, Ukraine

Abstract

The article is devoted to the study of family factors of personal identity development during adolescence and early adulthood, families with "problem-free" and "deviant" teenagers and high-school students were taken as examples. It was revealed that these categories of children are significantly different in terms of identity development, and their families are essentially different by the parameters of family solidarity and adaptation, by such characteristics of upbringing as positive interest, directive approach, hostility, autonomy, coherence of parents at upbringing.

Key words*: identity, self-identification, family system, solidarity, adaptation, positive interest, directive attitude, hostility, autonomy, inconsistency.*

Relevance of studies of a family as a factor at child's development is very high because the very foundations of functioning of a family as a social institution are being changed during modern social transformations. This leads to significant distortions in family functioning, in particular in their upbringing function implementation. Yet, a family role as a crucial agent of child's social development remains indisputable that necessitates studying of family characteristics and psychological conditions created in it for child's development, in particular identity development.

Many researchers from different spheres of psychology studied families with adolescents, including problems of child-parent relationships: Benjamin (1974), Вассерман, Горьковая & Ромыцина (2004) etc. At the same time, a present actual problem is to study family relationships as a factor of child's identity development during different age periods.

Analysis of psychological studies

Adolescence is rightly considered as one of the most difficult periods of ontogenesis (Боришевський, 2010; Выготский, 1984; Эльконин, 1989; Erikson, 1968 et al.). At the same time, researchers reckon adolescence years as a very difficult stage of family's activities and development (Варга, 2001; Черников, 2005; Эйдемиллер & Юстицкис, 2000 et al.).

When a family has teenage children, a load of each family's member grows, and the family becomes more sensitive to stress. Stresses and family difficulties at this stage are very diverse, the phenomenon of multiple layer crises is often observed: 1) an individual level of a crisis (a midlife crisis of parents or one of them and an adolescence crisis of a child),

2) crisis of marital relations, and 3) a crisis in family development (Варга, 2001; Дубровина, 1998; Черников, 2005). Complications to the family are present at other levels also: increased demands from the society side and from the extended family. Difficulties of this state are mirrored in the family system characteristics and in the field of child-parent relationships, which are undergoing significant changes during this period.

So, an adolescent has a desire to be detached from parents and importance of communication with peers growths (Выготский, 1984; Дубровина, 1998; Эльконин, 1989; Erikson, 1968; Кон, 1989; Бернс, 1986 et al.). The difficulty for parents lays in the need to review and restructure their relationships with adolescents, to change the style of upbringing and communication. Often parents are unable to see fast, intense processes of maturation during adolescence and to take them into own practice of upbringing and they try in every way to preserve "baby" forms of control and communication with their children, while teenagers need to communicate with adults "on equal terms" (Дубровина, 1998).

Cause-and-effect relationships between parents' upbringing styles and children's negative behavior formation are marked by contemporary researchers (Эйдемиллер, 2000; Фурманов, 2010; Варга, 2001 et al.). Thus, high aggression is mostly common for children from families with an upbringing style like "emotional rejection", when minimal attention to a child correlates with a lot of restrictions, severity of claims; "overprotection". High intensity of aggression together with strong feeling of guiltiness is characteristic for children from families with "cruel attitudes", with "dominant overprotection". Teenager's negativism during interactions with others is often the result of that indulging overprotection (Фурманов, 2010). Thus, the psychological studies associate formation of child's negative behavioral forms with non-constructive parenting styles.

An unfavorable situation in a family, in most cases, is the most important condition for formation and development of a "difficult" teenager's personality. Having explored the family determinants of teenagers' deviant behavior, Птичкина revealed differences in the characteristics of families with problem-free and deviant adolescents (Птичкина, 2006). Families with problem-free teens have warmer relationships, parental attitudes are not contradictory – they either are similar, or mutually reinforcing, and parents are willing to have dialogue and partnership with their teenagers. These families are characterized by stable, positive emotional relationship of a father and a mother; they are "child-centered".

Studies on parent-child relationships and adolescents' identity indicate that apathetic or neglecting parents favor to development of tangled identity for adolescents; parents' authoritarianism is associated with predetermine identity, but such relationship characteristics as trust, respect and support are often manifested in families where adolescents are characterized by achieved identity (Попова, 2005). However, given the complexity of the studied phenomena, influence of family factors on child's identity development has been insufficiently studied.

Family factors of identity development in adolescence and early adulthood were the **object of the research.**

The purpose of research is to analyze psychological characteristics of relationships in families with adolescent and high school students in the context of their impact on child's identity development.

Hypothesis of the research says that family relationships are an important factor of identity development, which can be considered as a system formation, a core of a personality.

Methods of the research
Exploring the psychological conditions of child's identity development in a family, our working group decided to study the phenomena of family interaction at two scales: at the level of all family and at the level of a parent-child subsystem. Determination of system characteristics

of families with adolescents and with senior school students was performed using the technique "Family adaptation and cohesion scale" (FACES-3) (Olson, 1993); the features of child-parent relationships were investigated using the technique «Teenagers about parents» (Вассерман, Горькова, Ромыцина, 2004). Identity features were studied with a questionnaire based on semi-structured interviews of Marsia (Marsia, 1980; Орестова & Карабанова, 2005).

The system characteristics of the family's model by Olson – the parameters of family cohesion and adaptability – were considered as the main indicators of families' optimal functioning or dysfunction in our study. The first parameter reflects an emotional aspect of relationships, a measure of emotional intimacy, which can vary from extremely low (divided) to extremely high (bounded). The other parameter characterizes families' abilities to change their rules, regulations, structure into the line with actual problems of their lives and development. Families of the base of the adaptation parameter can be ranged from rigid to chaotic (Olson, 1993).

Participants of the research

Since the purpose of our study was to investigate psychological conditions of child's identity development that are developed in families with different children's groups, three groups of studied people of 15-17 years old were chosen to compare:

1) teenagers and high school students enrolled in secondary schools who do not have significant personal and behavioral problems, they formed a control group of 62 people (31 girls, 31 boys);

2) children enrolled in a specialized art school (44 respondents, including 30 girls, 14 boys);

3) children with behavioral problems who are registered at the children's supervision service because of committed offenses (37 boys).

These experimental groups were chosen for the following reasons. Choice for examination of children with behavioral deviations was made due to the fact that the system concepts, which is the methodological basis of the study, considers any psychological symptoms, children's behavioral disorders as a sign of disturbed family interactions (Черников, 2005; Варга, 2001 et al.). Thus, these families are characterized by non-optimal or impaired interactions and family dysfunctions. On the other hand, deviant behavior is directly related to the process of person's identity development, as it is a manifestation of non-formed identity or its deformation.

The opposite pole of the identity is presented by the mature, achieved identity, the core of which consists of conscious, positive self-formed on the basis of individual experience of person's values. Families, that are able to form such a picture of oneself, such experiences and values for their children, are presented among different groups. However, our working group has assumed that most of them are the families of gifted children, who strongly support child's development; this is the reason of choice of the second experimental groups.

Results of the research

What are psychological conditions formed in the families with adolescents and high school students that belong to different groups – the "problem free" and "dysfunctional" ones, and how do they relate to identity characteristics?

The number of teenagers and high school students living in families of different types in accordance with this model are presented in the Table 1.

As it can be seen from the table, the families with artistic gifted children are mostly averagely balanced and balanced, so, they are distinguished by an optimal level of cohesion, they have quite flexible and transparent rules for functioning, a sufficient level of adaptability to stressful situations. The families of this group appear to be more problem-free than the families from the control group, and have differences at a significant level (p ≤ 0,05 by φ*-Fisher's test) in comparison with the other experimental group. The group with supervised children does not have balanced families, and more than half of the families are unbalanced,

Table 1. The number of studied people from different groups living in balanced, unbalanced and averagely balanced families (n=143, %)

Families' types	Experimental groups			Control group	
	Boys-delinquents, n=37	Artistic gifted children		Girls, n=31	Boys, n=31
		Girls, n=30	Boys, n=14		
balanced	–	40,0	16,7	21,3	16,4
averagely balanced	48,7	43,3	58,3	53,7	56,2
unbalanced	51,3	16,7	25,0	25,0	27,4

which indicates serious dysfunctions affecting different sides of family life. In fact, it means that more than half of the studied adolescents and high school students are living in crisis families who are unable to perform their functions, particularly with regard to children upbringing, to ensure their support and good patterns of behavior, which is important for children's identity development.

The system features that characterize the families with children of different groups to the greatest extent are shown in the Table 2.

Table 2. Intensity of system characteristics of the studied families from different groups (n=143, %)

Families' types	Experimental groups			Control group	
	Boys-delinquents, n=37	Artistic gifted children		Girls, n=31	Boys, n=31
		Girls, n=30	Boys, n=14		
Adaptation level					
rigid	10,8	3,3	-	3,8	4,1
structured	8,1	13,3	14,3	12,5	2,7
flexible	10,8	43,4	21,4	28,7	28,8
chaotic	70,3	40,0	64,3	55,0	64,4
Cohesion level					
divided	54,1	30,0	28,6	43,7	42,5
separated	37,8	46,7	64,3	42,5	38,4
connected	8,1	20,0	7,1	13,8	19,1
bounded	–	3,3	–	–	–

As it can be seen from Table 2, the families with children from the control group are described mostly as chaotic and in a lesser degree as flexible concerning adaptation types, and the level of cohesion often gravitate toward the divided pole. This means that most families with children of this group have clear internal boundaries, the emotional distance between family members is average (optimal), but often not optimal, distant; while families' rules are flexible, however, flexibility in a significant number of families is excessive and manifests

itself in fuzziness of family structure, hierarchy, roles, significant inconsistencies that already creates the chaotic pole of adaptation.

Negative trends identified in the families from the control group are even more expressive in the families with boys-delinquents. Thus, from the point of view of adaptation, "golden mean" is very rare in such families, but the poles are presented much more – especially rigid and chaotic types of adaptation. It means that the families with such children often respond erratically to difficulties of life, have problems with family hierarchy, role intelligibility and rule clarity. However, some of them, on the contrary, have too rigid structure. In terms of emotional intimacy, its deficit in these families is even more expressive: the number of divided families is significantly higher than the number of such families in the control group (p≤0,05), and the number of families with optimal types of cohesion is lower.

Family with art-gifted children are generally more balanced compared to other groups of children: the chaotic type of adaptation is less expressed, which is characteristic for the families from other groups, and levels of cohesion mainly belong to the middle types – separated and connected. The families with girls from this group have more pronounced emotional connection than the families with boys, relationships in the latter are more distanced.

The following results were obtained with the technique "Teenagers about their parents" in different groups (Table 3):

Table 3. The results obtained with the technique "Teenagers about their parents" in different groups (n=143, "raw" marks/stens)

Upbringing characteristics	Experimental groups						Control group			
	Boys-de-linquents, n=37		Artistic gifted children				Girls, n=31		Boys, n=31	
			Girls, n=30		Boys, n=14					
	father	mo-ther	fa-ther	mo-ther	fa-ther	mo-ther	fa-ther	mo-ther	fa-ther	mo-ther
Positive interest	9,8 2	13,5 2	13,3 3	16,9 3	13,6 3	14,9 3	11,9 3	13,4 2	10,8 2	13,1 2
Directive approach	13,6 4	13,9 4	9,5 3	10,5 3	10,5 3	10,2 3	9,0 3	10,1 3	9,6 3	11,0 3
Hostility	7,2 4	6,8 4	5,2 3	5,0 3	5,4 3	5,9 3	6,2 4	6,0 3	6,7 4	6,5 4
Autonomy	11,8 3	11,1 3	11,4 3	10,8 3	11,4 3	11,7 3	9,9 3	10,0 3	10,6 3	10,1 3
Inconsistency	7,8 3	9,8 4	7,9 3	7,8 3	8,4 3	8,4 3	8,1 3	8,9 3	8,3 3	8,7 3

As the table shows, the main indicators of parental attitudes and upbringing approaches in the families with adolescents and high school students of the control group are: somewhat reduced positive interest to children, with the exception of fathers to daughters, as well as an increased level of hostility of fathers and mothers, with the exception of relationships of mothers to daughters. Adolescents estimate directive approach, autonomy and consistency of their parents at upbringing at an average level.

Surveyed teenagers and youth under supervision evaluated their fathers and mothers as ones who show lack of positive interest to them, high directive approach and hostility and an average level of autonomy. They believe that their fathers are more consistent in upbringing, while mothers, in their opinion, have relatively high inconsistency. The fathers of these boys are less interested in their children, they are more hostile against them; mothers exhibit higher positive interest, but the studied people noted a high level of their hostility, which indicates that mothers have ambivalent feelings leading to inconsistencies in upbringing, the basis of which for them is "a firm hand" (high directive approach).

Both parents in the group of artistically-gifted children have higher absolute values of positive interest to their children, stronger directive approach to girls, significantly lower level of hostility and slightly lower level of inconsistency. The fathers and mothers of these children show higher levels on the scale of autonomy, it indicates that their perception to their children is rather indulgent, undemanding or even unincorporated.

Thus, families of gifted children are marked by positive interest of both parents to their children, moderate directive approach. At the same time, lower parents' hostility towards their children indicates higher degree of acceptance of children, their support form parents' side. These parents are less concerned with upbringing problems that is perceived positively by most children as autonomy necessary for creative person development, in addition, they show greater consistency in upbringing.

The study of identity development, on the base of its statuses appeared in different spheres of individual life activities, showed significant differences between the studied groups (Table 4).

As Table 4 shows, adolescents and youths with behavioral problems have the lowest levels of professional identity: they either do not think about their professional self-determination, or agree with options that significant intimates offer to them. Differences in indicators of identity development for studied people from this group in comparison with the control group reach high levels of significance: for the status of diffuse identity, $\varphi*= 3,77$ at $p\leq0,000$; for predetermined identity, $\varphi*=1,61$ at $p\leq0,054$; for moratorium, $\varphi*=2,03$ with $p\leq0,021$. The essential characteristic of gifted children in this sphere is that the most of them have achieved identity or examine several specific alternatives considering career choices (moratorium), and their parents have a "consultative" vote. Indicators of identity status of this group of teenagers and youths are significantly different from the control group (diffuse identity: $\varphi*=1,65$ at $p\leq0,049$; predetermined identity: $\varphi*= 3,74$ at $p\leq0,000$; moratorium: $\varphi*=2,00$ at $p\leq0,023$; achieved identity: $\varphi*=1,51$ at $p \leq0,066$ as a trend); and compared with a group of delinquent teenagers, these differences are even more significant. Indicators of the art-gifted girls differ significantly also from those of the control group representatives regarding intensity of predetermined ($\varphi*=2,01$ at $p\leq0,022$) and achieved identity ($\varphi*=1,97$ at $p\leq0,024$).

Religious and philosophical views of most teenagers and high school students are not formed yet or borrowed from their parents and grandparents. The high status of identity in this sphere is shown in the large degree by the gifted children and by the girls from the control group, and at least by the boys-delinquents. Thus, the number of artistic gifted boys having the status of predetermined identity is less than the number for the control group, it indicates their independence and activity in formation of their own world view, and their indexes of achieved identity are significantly different from those of teenagers-delinquents ($\varphi*=1,66$ at $p\leq0,048$). Among the interviewed girls in this sphere of identity, higher statuses were recorded also in the group of artistic-gifted children ($\varphi*=1,96$ at $p\leq0,025$ for the status of "moratorium").

The majority of teenagers and youths, regardless of the studied group, is not interested in politics; only members of the control group and quite a few gifted children show some interest in it, the latter explain lack of interest by understanding of other their mission - creativity. A small part of boys from the control group "try on" still possibility to be engaged into politics in

the future, they talk about searching for their own political positions. The greatest differences were determined for the "moratorium" status, its level for the control group representatives was significantly higher than its level for the respondents form both experimental groups (φ*=2,51 at p≤0,005 compared with the group of boys-delinquents and φ*=1,90 at p≤0,029 compared with the artistic gifted boys).

Table 4. The representation of identity statuses of different groups of respondents (n=143, %)

Identity statuses in different spheres of individual life activities		Experimental groups			Control group	
		Boys-delin-quents, n=37	Artistic gifted children		Girls, n=31	Boys, n=31
			Girls, n=30	Boys, n=14		
professional	diffuse	70,2	10,0	7,1	16,3	26,0
	predetermined	16,3	3,3	–	18,2	32,9
	moratorium	8,1	26,7	57,1	30,0	26,0
	achieved	5,4	60,0	35,8	35,0	15,1
religious	diffuse	70,2	46,7	57,4	36,2	58,9
	predetermined	24,4	16,7	14,2	38,8	31,6
	moratorium	5,4	30,0	21,3	18,8	6,8
	achieved	–	6,6	7,1	6,2	2,7
political	diffuse	91,9	83,4	85,8	88,8	82,2
	predetermined	8,1	13,3	14,2	5,0	5,5
	moratorium	–	3,3	–	6,2	9,6
	achieved	–	–	–	–	2,7
love	diffuse	67,6	10,0	14,2	17,4	43,8
	predetermined	10,8	3,3	–	15,0	8,2
	moratorium	21,6	40,0	64,5	48,8	42,5
	achieved	–	46,7	21,3	18,8	5,5
friendship	diffuse	40,5	6,6	–	3,8	19,2
	predetermined	8,1	–	–	1,2	1,3
	moratorium	51,4	50,0	42,9	52,5	64,4
	achieved	–	43,4	57,1	42,5	15,1
family	diffuse	54,1	10,0	28,5	26,2	37,0
	predetermined	40,5	40,0	35,5	33,8	53,4
	moratorium	5,4	26,7	21,3	28,0	9,6
	achieved	–	23,3	14,2	12,0	–
gender	diffuse	43,3	33,4	28,6	31,3	45,3
	predetermined	56,7	23,3	43,0	46,2	53,4
	moratorium	–	20,0	14,2	10,0	1,4
	achieved	–	23,3	14,2	12,5	–

As the table show, teenagers and youths committed offenses do not think on the foundations of loving relationships, most of them have the statuses of diffused or predetermined identity, so their results differ significantly from the results of artistically-gifted boys (for diffused identity: $\varphi*=3,69$ at $p\leq0,000$; for predetermined identity: $\varphi*=2,07$ at $p\leq0,019$) and from the results of the control group (for predetermined identity: $\varphi*=1,74$ at $p\leq0,041$). Artistic gifted children have higher statuses of identity in this sphere. This is based on some experience of relationships and desire to understand their essence, nature, make appropriate decisions for themselves as to how to build these relationships. Thus, higher identity statuses of artistic gifted boys in love sphere in comparison with the control group were marked as a trend, and in comparison with a group of boys-delinquents were revealed on a significant level (for the status of "moratorium»: $\varphi*=2,86$ at $p\leq0,001$, for the status of achieved identity: $\varphi*=2,99$ at $p\leq0,000$). Significant differences between groups of girls were obtained for predetermined identity ($\varphi*=1,68$ at $p\leq0,046$) and acquired identity ($\varphi*=2,37$ at $p\leq0,008$). Among the artistic gifted children and representatives of the control group, girls are characterized by higher levels of identity in this sphere than boys.

In the sphere of friendship, the representatives of artistic gifted children and the control group showed more uniform pattern, while boys-delinquents are characterized by lower levels of identity, which means less meaningfulness of these relationships, less understanding and acceptance of their value bases. Thus, the artistic gifted boys do not have statuses of diffused and predetermined identity in friendship, and they are significantly different from the control group at this point (for diffused identity: $\varphi*=2,76$ at $p\leq0,002$), and especially from the group of delinquents (for diffused identity: $\varphi*=4,34$ at $p\leq0,000$, for predetermined identity: $\varphi*=1,78$ at $p\leq0,038$). Accordingly, presence of higher identity statuses in this group is significantly higher compared to the other groups. This is especially true for achieved identity, indicators of which are higher compared with the control group ($\varphi*=2,85$ at $p\leq0,001$) and with the group of delinquents ($\varphi*=5,4$ at $p\leq0,000$)

Identity in family sphere of boys and girls from the control group differs significantly: the boys generally show greater dependence on their families, which is manifested in the predominance of predetermined identity status. This is evident in particular in uncritical borrowing of parents' family patterns, or, on the contrary, in their full rejection without awareness of positive and negative aspects of parental families. These differences for artistic gifted children are not so significant due to the fact that boys have higher levels of identity in this sphere. If was revealed during comparison of different groups that delinquent boys demonstrate lower identity status – diffused one – as irrelevance of this sphere for them (the differences are significant in comparison with the control group as a trend, in comparison with the artistic gifted boys $\varphi*=1,68$ at $p\leq0,046$) or predetermined identity, usually in a form of denial of parents' patterns. Achieved identity status was revealed for 14,2% of artistic gifted boys that evidences significant differences of this index between groups ($\varphi*=2,4$ at $p\leq0,007$ as compared to the delinquent boys' group and $\varphi*=2,34$ at $p\leq0,01$ as compared with the control group). Groups of girls are significantly different only in terms of diffuse identity status that prevails in the control group ($\varphi*=1,68$ at $p\leq0,046$).

In the sphere of gender identity, girls in both groups and artistically gifted children have higher statuses: so, along with diffused and predetermined identity, which is manifested in acceptance of their gender and associated with gender roles, stereotypes without critical reflection, these respondents marked statuses of moratorium and acquired identity. Delinquent teenagers and youth are mainly characterized by diffused or predetermined identity in this sphere, resulting in a particularly emphatic masculinity, failure to accept any other points of view, statements about the meaninglessness of this question itself, homophobia. This fact is supported by obtained significant differences between indicators of higher identity statuses

of artistically gifted boys and the control group (for "moratorium»: φ∗=1,67 at p≤0,047, for achieved identity: as a trend), and especially the group of delinquent adolescents (for moratorium achieved identity: φ∗=2,39 at p≤0,007). The groups of girls in this identity sphere are significantly different by predetermined identity (φ∗=1,9 at p≤0,029).

Thus, identity of representatives of different groups differs quite significantly in terms of its development: the most developed identity in different life spheres is notable for the artistically-gifted children, the least developed, immature identity is characteristic for delinquent teenagers and youth. Interviewees from the control group can be found mostly in the middle between the two experimental groups.

The identified differences regarding families' system characteristics, parents' upbringing approaches, as well as significant differences in levels of identity development of children from different groups suggest that families with artistic gifted children create more favorable conditions for children development, in particular for development of their personal identity as a personal core. It includes such all families' system factors as more optimal parameters of family functioning, especially optimal emotional cohesion and adaptation. At the level of parent-child subsystem, it means certain characteristics of parental attitude, parents' upbringing styles, manifested in high positive interest to their children, moderate directive approach, autonomy, a low level of hostility, real parents' consistency at upbringing.

Conclusions

The most favorable conditions for children's identity development in families are determined by optimal levels of family cohesion and adaptability, such upbringing characteristics as positive interest, democratic style of parenting, acceptance of own children, reasonable autonomy, a high degree of parents' consistency during upbringing. Such features are characteristic for most families with problem-free children – gifted adolescents and high school students, and, to some degree, to the control group. Families with "problem" children have often unfavorable conditions for personal development, which are manifested in the sub-optimal levels of cohesion and adaptation – significant emotional distancing, chaotic or rigid structures. Parent-child relationships in these families are marked by low positive interest to children and low upbringing consistency, remarkable directive approach from mothers and fathers' hostility. Various conditions of family environment lead to significant differences in the levels of children's identity development during adolescence and young adulthood.

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FAMILY FACTORS OF PERSON'S IDENTITY DEVELOPMENT DURING ADOLESCENCE AND EARLY ADULTHOOD

Summary

Tetiana Yablonska,
Kostyuk Institute of Psychology, Ukraine

Relevance of studies of a family as a factor at child's development is very high because the very foundations of functioning of a family as a social institution are being changed during modern social transformations. This leads to significant distortions in family functioning, in particular in their upbringing function implementation. Yet, a family role as a crucial agent of child's social development remains indisputable that necessitates studying of family characteristics and psychological conditions created in it for child's development, in particular identity development.

The purpose of research is to analyze psychological characteristics of relationships in families with teenagers and high school students in the context of their impact on child's identity development.

The research is devoted to the study of family factors of personal identity development during adolescence and early adulthood, families with "problem-free" and "deviant" teenagers and high-school students were taken as examples. It was revealed that these categories of children are significantly different in terms of identity development, and their families are essentially different by the parameters of family solidarity and adaptation, by such characteristics of upbringing as positive interest, directive approach, hostility, autonomy, coherence of parents at upbringing.

The identified differences regarding families' system characteristics, parents' upbringing approaches, as well as significant differences in levels of identity development of children from different groups suggest that families with artistic gifted children create more favorable conditions for children development, in particular for development of their personal identity as a personal core. It includes such all families' system factors as more optimal parameters of family functioning, especially optimal emotional cohesion and adaptation. At the level of parent-child subsystem, it means certain characteristics of parental attitude, parents' upbringing styles, manifested in high positive interest to their children, moderate directive approach, autonomy, a low level of hostility, real parents' consistency at upbringing.

The most favorable conditions for children's identity development in families are determined by optimal levels of family cohesion and adaptability, such upbringing characteristics as positive interest,

democratic style of parenting, acceptance of own children, reasonable autonomy, a high degree of parents' consistency during upbringing. Such features are inherent for most families with problem-free children – gifted adolescents and high school students, and, to some degree, to the control group. Families with "problem" children have often unfavorable conditions for personal development, which are manifested in the sub-optimal levels of cohesion and adaptation – significant emotional distancing, chaotic or rigid structures. Parent-child relationships in these families are marked by low positive interest to children and low upbringing consistency, remarkable directive approach from mothers and fathers' hostility. Various conditions of family environment lead to significant differences in the levels of children's identity development during adolescence and young adulthood.

II. THE DEVELOPMENT OF PROFESSIONAL COMPETENCES

USING STANDARDS-BASED AND EVIDENCE-BASED CONTENT IN EARLY CHILDHOOD PROFESSIONAL DEVELOPMENT

Rashida Banerjee, Harvey Rude
University of Northern Colorado, USA

Abstract

Converging empirical evidence has identified key components of effective practices for providing high-quality services to young children and their families. The article describes the components of professional development that result in well qualified, well-trained and effective early childhood professionals who can implement evidence-based practices to improve outcomes of young children and their families. Specifically, standards-based and evidence-based professional development competencies developed and guided by national and state agencies are discussed.

Key words: *early childhood; early childhood special education; professional development; standards-based competencies; evidence-based competencies*

There is a critical need for improved professional development practices which bridge the gap between research and practice for educators of young children (Campbell & Milbourne, 2005; Helburn, 1995; Sheridan, Edwards, Marvin, & Knoche, 2009; Whitebook, Howes, & Phillips, 1989). The newly reauthorized Individuals with Disabilities Education Improvement Act (IDEA, 2004) in the U.S. states that "high quality, comprehensive professional development programs are essential to ensure that the persons responsible for the education of children with disabilities possess skills and knowledge necessary to address educational and related needs of those children" (Sec 650.6). IDEA further states that "models of professional development should be scientifically based and reflect successful practices, including strategies for recruiting, preparing, and retaining personnel" (Sec 650.7).

Professional development in early childhood

Scientific problem: Well prepared early childhood workforce must possess professional ethics; a specialized knowledge of child development and learning, family-centered practices, and cross cultural competence (Lynch & Hanson, 2011); an ability to use assessment data to make informed decisions about programming (Bagnato, Neisworth, & Pretti-Frontczak, 2010); and the ability to collaborate successfully with families and professionals from other disciplines (Bruder & Dunst, 2005; Odom & Wolery, 2003).

Aim of the research: The purpose of the manuscript is to share standards-based and evidence-based professional guidelines to prepare early childhood professionals to work with young children with and at-risk for disabilities and their families.

Methodology used: For the purpose of this paper, the following definitions of professional development adapted from Kagan & Neuman (1996) are used for clarity and consistency. *Preservice training* refers to any early childhood education (ECE) instruction received through coursework such as at secondary, vocational, college, professional development college or at graduate level to prepare the candidate in child related fields such as developmental psychology, child care, early childhood education, or special education. *Inservice training* refers to any ECE instruction received while concurrently working in an early childhood setting such as childcare, preschool or early elementary classes. A range of inservice professional development models have been practiced – from the short-term stand-alone workshops to provision of long-term support with the inclusion of teachers as collaborators in the process (Klingner, Ahwee, Pilonieta, & Menendez, 2003).

This paper focuses on preservice professional development; i.e. those forms and related processes of professional development that are most commonly associated with practitioners *before* they begin employment in early childhood. These include formal education (degree earned prior to employment) and credentialing (agency or organizational qualifications or standards). Further, this paper will cover formal education and credentialing for both early childhood and early childhood special education teacher in the U.S. Readers are referred to other extensive sources that describe inservice professional development of employed staff or professionals and research associated with that (e.g., Sheridan et al., 2009).

Preservice professional development in early childhood

Although there are a number of components of a teacher's background which may relate to her classroom performance, such as years of experience, feelings of self-efficacy, and teacher's beliefs and attitudes and their impact on children's growth and development; recent attention in early childhood has focused on quality of inservice and preservice professional development. Researchers have consistently, frequently, and successfully proven that well-trained personnel lead to a high-quality early childhood programs and better child and family outcomes (Odom & Wolery 2003). A number of researchers have stated that there is a strong correlation between a teacher's background and her classroom quality (e.g Greenwood, Tapia, Abbott, & Walton, 2003; Cassidy, Buell, & Pugh-Hoese, 1995; Whitebook et al., 1989). The National Day Care Study (Ruopp, Travers, Glantz, & Coelen, 1979) and the National Child Care Staffing Study (Whitebook et al., 1989) have found strong relationships between teacher qualifications and quality of care and education received by young children.

Though the National Day Care Study (Ruopp et al., 1979) highlighted the relative unimportance of teacher's general education to their classroom behaviors, the study found that a strong relationship exists between teacher education specific to child development and early childhood education and appropriateness of a teacher's classroom behaviors. The study also found that teachers with training in early childhood engaged in 28% more social interaction, cognitive stimulation and language stimulation with children than did teachers without training.

However, the National Child Care Staffing Study (Whitebook et al.,1989) reported that formal education, regardless of the field of study, was the best predictor of appropriate caregiving. The National Child Care Staffing Study reported that teachers were more sensitive, less harsh, and less detached and more likely to provide appropriate caregiving than teachers receiving less than 15 hours of formal education. Thus, the importance of quality teachers to

improve children's outcomes is evident, but improving education professionals' performance remains a challenge.

Using standards-based content in EC preservice professional development

High-quality personnel preparation programs must include training that incorporates the acquisition of knowledge, skills, and dispositions as well as the application of this knowledge into practice (Winton, McCollum, & Catlett, 2008). The coherent, value-based, and evidence-based professional standards that prepare early childhood professionals provide the structure for determining levels of mastery, documenting individual competencies, and determining the effectiveness of the training (Hyson & Biggar, 2006; Neville, Sherman, & Cohen, 2005). Professional accrediting organizations in the U.S., such as the National Council for Accreditation of Teacher Education (NCATE) and Teacher Education Accreditation Council (TEAC), (now combined to the Council for the Accreditation of Educator Preparation (CAEP), use personnel preparation standards for accreditation of teacher preparation programs.

The use of professional standards assures that special educators have the knowledge and skills to deliver effective and appropriate services to children birth through 8 years with and without special needs and their families. Development and implementation of professional standards to prepare educators in early childhood/early childhood special education is critical to ensure that professionals are properly credentialed and possess the skills and knowledge to serve young children and their families. The professional standards are the driving force behind how states and nations approve a program, assure systemic assessment, design the curriculum and guide clinical training, and provide guidance for effective professional development to its early childhood professionals. Thus, professional standards are a foundation for creating, as well as maintaining, a qualified early childhood workforce.

Different national and state standards guide the process of licensing and accreditation of early childhood professionals. The following sections describe the national and state standards that guide the higher education personnel preparation programs in the United States. to "assure that the candidates they prepare have mastery of the appropriate knowledge and skills" (CEC, 2009, p. 223).

NAEYC professional development standards for early childhood educators

The National Association for Education of Young Children (NAEYC) is a 100,000-member professional association of teachers, administrators, researchers, advocates, leaders in state and federal organizations and others who are concerned with the positive development and education of children from birth through age 8 (Hyson & Biggar, 2006). As a part of its effort to improve professional practice in early childhood education, NAEYC first established standards for early childhood professionals in 1982. Using expert review and consensus building, the standards were revised and approved by the NAEYC Board in 2001 for initial licensure – i.e. Baccalaureate and Master's programs that offered initial licensure programs for early childhood professionals. The standards for advanced programs, also approved the same year, are utilized by institutions that offer licensure in masters and doctoral programs that build on prior competencies.

The revised standards reflected NAEYC's emphasis on outcomes of professionals as measured by student teaching evaluations, comprehensive examinations, licensure test results, and the changing role of the early childhood professionals in working with changing demographics of the U.S. population. The most recent revisions to these standards took place in 2010. The seven NAEYC standards for initial licensure programs are listed in Table 1. The complete set is available at: *standards at* http://www.naeyc.org/ecada/standards.

Table 1. The professional development standards for early childhood personnel development from National Association for Education of Young Children

Standard 1. Promoting child development and learning
Standard 2. Building family and community relationships
Standard 3. Observing, documenting, and assessing to support young children and families
Standard 4. Using developmentally effective approaches
Standard 5. Using content knowledge to build meaningful curriculum
Standard 6. Becoming a professional
Standard 7. Early childhood field experiences

CEC-DEC professional development standards for early childhood special educators

The Council for Exceptional Children (CEC), the international special education professional organization based in the US, is responsible for the development and dissemination of special education professional standards and uses a "rigorous consensus evaluation process to identify, update and maintain sets of knowledge and skills for entry-level and advanced special educators" (CEC, 2009, p. 8). The rigorous consensus development process used by CEC to develop, revise, and validate standards ensures that the professional standards are field initiated, evidence based, and validated by stakeholder groups such as families, practitioners, administrators, researchers, and policy makers. These standards are a critical component of an aligned accountability system. Like NAEYC standards, CEC standards are developed at two levels-- initial and advanced. CEC (2010) defines initial programs as those "at the baccalaureate or post-baccalaureate levels preparing candidates for the first license to teach," while the advanced programs are those "at post-baccalaureate levels for (1) the continuing education of teachers who have previously completed initial preparation or (2) the preparation of other school professionals" (p. 7). Personnel preparation programs in higher education align their program assessments to the CEC's seven preparation standards with the 28 key elements and program reviewers from the professional accrediting organizations review for alignment between the program assessments and the seven preparation standards with the key elements. CEC's preparation standards are, by nature, general in that they are intended to apply to *all* special educators. Table 2 lists these major preparation standards. The detailed standards and their rationale for inclusion can be found at: http://www.cec.sped.org/.

Table 2. The seven professional development standards for special education personnel development from Council for Exceptional Children

Learner and Learning
    1 Assessment
Content Knowledge and Professional Foundations
    2 Curricular Content Knowledge
Instructional Pedagogy
    3 Program, Services, and Outcomes
    4 Research and Inquiry
Professionalism and Collaboration
    5 Leadership and Policy
    6 Professional and Ethical Practice
    7 Collaboration

The Division for Early Childhood (DEC) of the Council for Exceptional Children is the largest international professional organization dedicated to improving educational outcomes for individuals with exceptionalities, students with disabilities, and/or the gifted. The specialty professional standards developed by DEC guide professionals development for early interventionists and early childhood special educators who work with children with disabilities who are birth to 8 years of age. These standards are informed by the CEC's standards and follow the same seven standards.

DEC revised and validated initial--and developed and validated advanced-- personnel preparation standards for early childhood special educators and early interventionists between 2005 and 2008. The DEC standards follow the same ten topical areas as the CEC standards. The specialized DEC professional standards can be found at:

http://www.cec.sped.org/Standards/Special-Educator-Professional-Preparation/CEC-Initial-and-Advanced-Specialty-Sets.

State professional development standards for early childhood educators
In the United States, all programs must have state approval to issue a teaching degree that counts toward satisfying state licensure requirements. State education agencies or state professional standards boards are responsible for granting approval. Each of the 50 states and the trust territories in the United States identifies the requirements by which professionals qualify to teach. All states have adopted some standards for approving teacher education programs, but these requirements vary considerably across states. Thus, teacher certification requirements vary across states and sometimes within states. Certification policies "change over time and are influenced by state and federal legislation, research and recommended practices in the specific educational discipline, and direct service needs of local communities" (Stayton, Smith, Dietrich, & Bruder, 2011, p.24). In order to demonstrate that teachers have met the necessary knowledge and skills competencies, states often require professionals to successfully pass state or national tests before practicing. Similarly, institutes of higher education are required to go through rigorous accreditation process to ensure that the content taught in the programs meet the state standards.

Stayton, Smith, Dietrich, & Bruder (2011) investigated the extent to which states' early childhood special education certification standards align with professional association national standards. They found that: (a) there was limited use of national standards in state certification requirements for early childhood special education – only few states utilize the national standards for their credentialing requirement; (b) state standards seem to be lacking in specificity in wording as compared with the language used in the national standards which can result in confusion created when attempting to create and facilitate reciprocal policies and practices across state lines; and (c) there is lack of access and easy availability of state certification guidelines which could result in frustration for both the future professionals and the higher education preparing these professionals. Authors further found that the most commonly aligned state and national standards covered knowledge and skills statement related to assessment and development and characteristics of learners. Thus, there is a greater need for state policy makers to align state and national standards for ease of transfer of credentialing and knowledge and skills competency across state borders. Similarly, there is a need for national professional organizations to become aware of state functioning and provide resources for states to utilize the professional standards.

Embedding evidence-based content in early childhood professional development
While it is important to incorporate standards-based content in the professional development programs for early intervention and early childhood special education personnel

working with children birth to eight years of age, standards for credentialing are often developed through bureaucratic political and legislative mechanisms; thus, making them hard to revise with the changes in the new and emerging empirical and clinical evidence. Therefore, in order reflect the new and most current learning in the field about the child development and growth, it is important to include evidence-based content in preservice professional preparations programs to guide the curriculum.

What is "evidence"?
Traditionally evidence-based practices have meant practices that are supported by findings from multiple, high quality, experimental research studies (Cook, Tankersley, Cook & Landrum, 2008). Lomas, Culyer, McCutcheon, McAuley, & Law (2005) describe two concepts of evidence: (a) *colloquial* [or wisdom-based] *evidence*, which focuses on relevant information at a more personal and contextual level (e.g. experiential knowledge, societal values, political judgment, resources, habits and tradition); and (b) *scientific evidence*, which is derived from systematic, replicable and verifiable methods of collecting information and facts that may be context-specific or context free. Two separate sets of inquiry guide the search for these two concepts of evidence: wisdom-based inquiry and knowledge-based inquiry (Maxwell, Field, & Clifford, 2005). However, more and more policy makers, practitioners, researchers, and families tend to agree that the sheer pursuit of knowledge in a knowledge-based inquiry, without addressing the political, personal, and social problems we encounter, is not enough to provide effective and meaningful services to children and youth with disabilities and their families. The value driven, wisdom-based inquiry that leads to wisdom-based evidence is also needed.

Commonly used guidelines for evidence-based practices in early childhood
One of the hallmarks of any profession (Institute of Medicine & National Research Council, 2012), and a function of national organizations such as DEC and NAEYC, is to establish practice guidelines that bring coherence and quality to the services provided by professionals in the field. The following two sets of practices guide the recommended practices in early childhood and early childhood special education. These practices are a result of systematic and thorough synthesis of evidence in the field and guide both the inservice and preservice professional development and practice in the field.

Developmentally appropriate practices (DAP). Grounded both in the research on child development and learning and in the knowledge base regarding educational effectiveness, the NAEYC's DAP outline activities that promote young children's optimal learning and development. Many teachers themselves lack the current knowledge and skills needed to provide high-quality care and education to young children, at least in some components of the curriculum. To make these decisions with well-grounded intentionality, teachers need to have knowledge about child development and learning in general, about the individual children in their classrooms, and about the sequences in which a domain's specific concepts and skills are learned. Teachers also need to have a well-developed repertoire of teaching strategies to employ for different purposes. DAP are informed by what we know from theory and current literature about how children develop and learn. Copple and Bredekemp (2009) recommend that early childhood practitioners must consider these three areas of knowledge in all aspects of their work with children: (a) What is known about child development and learning – referring to knowledge of age-related characteristics that permits general predictions about what experiences are likely to best promote children's learning and development; (b) What is known about each child as an individual – referring to what practitioners learn about each child that has implications for how best to adapt and be responsive to that individual variation; and

(c) What is known about the social and cultural contexts in which children live – referring to the values, expectations, and behavioral and linguistic conventions that shape children's lives at home and in their communities that practitioners must strive to understand in order to ensure that learning experiences in the program or school are meaningful, relevant, and respectful for each child and family. Table 3 lists the 12 principles that guide the developmentally appropriate practices.

Table 3. The 12 principles that guide developmentally appropriate practices for early Childhood personnel from National Association for Education of Young Children

1. All the domains of development and learning – physical, social and emotional, and cognitive – are important, and they are closely interrelated. Children's development and learning in one domain influence and are influenced by what takes place in other domains.
2. Many aspects of children's learning and development follow well documented sequences, with later abilities, skills, and knowledge building on those already acquired.
3. Development and learning proceed at varying rates from child to child, as well as at uneven rates across different areas of a child's individual functioning.
4. Development and learning result from a dynamic and continuous interaction of biological maturation and experience.
5. Early experiences have profound effects, both cumulative and delayed, on a child's development and learning; and optimal periods exist for certain types of development and learning to occur.
6. Development proceeds toward greater complexity, self-regulation, and symbolic or representational capacities.
7. Children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers.
8. Development and learning occur in and are influenced by multiple social and cultural contexts.
9. Always mentally active in seeking to understand the world around them, children learn in a variety of ways; a wide range of teaching strategies and interactions are effective in supporting all these kinds of learning.
10. Play is an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence.
11. Development and learning advance when children are challenged to achieve at a level just beyond their current mastery, and also when they have many opportunities to practice newly acquired skills.
12. Children's experiences shape their motivation and approaches to learning, such as persistence, initiative, and flexibility; in turn, these dispositions and behaviors affect their learning and development.

Division for Early Childhood-Recommended Practices (DEC-RP). In 2005, DEC-RP (Sandall, Hemmeter, Smith, & McLean, 2005) were developed and validated after a thorough and systematic review of literature of practices that provide improved outcomes for young children with disabilities and are related to the personnel who service them. Grounded in recent research on effective practices in early childhood special education, the DEC-RP serve as a guide to inform and improve the quality of services provided to young children with and at risk for disabilities and their families.

The practices are derived from two key sources. One source is the scientific literature on effective practices for young children with disabilities, their families, and the personnel who work with them. The other source is the knowledge and experience of those who work with young children and their families. The practices are user-friendly and aimed at bridging the gap between research and practice. The practices are to be used by individuals working in a variety of early childhood settings that provide services to young children with disabilities and other special needs from infancy through age five. These settings include early intervention programs (home and center based), preschool and preschool special education programs, child care programs, Head Start, public schools, hospital based programs, and other programs in which young children receive developmental, educational and related services.

The practices are grouped together as practices that relate to *Direct Services* and *Indirect Supports* for these direct services to occur. The five practices strands included in the direct services include: (a) assessment practices; (b) child-focused practices; (c) family-based practices; (d) interdisciplinary models; and (e) technology applications. Indirect supports include practices that are necessary for high quality direct services to occur. They include: (a) policies, procedure, and systems change;and (b) personnel preparation. The DEC-RPs are currently undergoing revisions. The DEC has formed a Commission to oversee the revision of the DEC Recommended Practices. The Commission is charged with ensuring that the updated DEC Recommended Practices achieve the goal of informing and improving the quality of services provided to young children with disabilities and their families. The new practices will become available in 2014 and can be accessed at http://www.dec-sped.org/.

Conclusion and future directions

Early childhood professional development has received significant attention by researchers, policy makers, and practitioners as accountability for outcomes is high and demands for qualified early childhood practitioners has increased (Snyder, Hemmeter, and McLaughlin, 2011). Use of standards-based and evidence-based content is critical to preparing professionals who work with young children with or without disabilities and their families in early childhood settings. However, having standards-based and evidence-content available to programs that prepare personnel is not enough. It is critical to identify strategies to embed this content into formal education and credentialing systems when preparing early childhood workforce. In-depth information about how research and evidence are embedded in course curriculum and supervised clinical experience is important. Furthermore, additional research on curricula and instructional practices is needed to ensure that professional development focuses on aspects of the early childhood program that are most likely to lead to significant gains for children.

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USING STANDARDS-BASED AND EVIDENCE-BASED CONTENT IN EARLY CHILDHOOD PROFESSIONAL DEVELOPMENT

Summary

Rashida Banerjee and Harvey Rude,
University of Northern Colorado, USA

Probably nothing affects the quality of the intervention that young children with a disability receive more directly than the knowledge and skills of the adults who work and play with them. Thus, recent attention in early childhood has focused on quality of inservice and preservice professional development.

The manuscript shares standards-based and evidence-based professional guidelines to prepare early childhood professionals to work with young children with and at-risk for disabilities and their families. Specifically, this paper covers formal education and credentialing for both early childhood and early childhood special education teacher in the U.S. The coherent, value-based, and evidence-based professional standards that prepare early childhood professionals provide the structure for determining levels of mastery, documenting individual competencies, and determining the effectiveness of the training. The Council for the Accreditation of Educator Preparation (CAEP) uses national personnel preparation standards for accreditation of teacher preparation programs. The two national organizations that provide the guidance for these early childhood professional standards are National Association for Education of Young Children and Council for Exceptional Children-Division for Early Childhood. Additionally NAEYC and CEC-DEC provide recommendations for use of evidence-based practices in to guide early childhood professional development.

However, having standards-based and evidence-content available to programs that prepare personnel is not enough. It is critical to identify strategies to embed this content into formal education and credentialing systems when preparing early childhood workforce. Furthermore, additional research on curricula and instructional practices is needed to ensure that professional development focuses on aspects of the early childhood program that are most likely to lead to significant gains for children.

PECULIARITIES OF TEACHERS' COPING STRATEGIES

Albina Kepalaite
Vytautas Magnus University, Lithuania

Abstract

This research aims to reveal teachers' stress coping peculiarities. It was identified that teachers most often used planful problem solving and accepting responsibility, while escaping-avoidance and confrontation were used most rarely. Female teachers used all coping strategies more often than male teachers. Succession of frequency of coping strategies in male and female groups differs. Senior women use confrontation and distancing coping more rarely than younger women. The specificity of frequency of coping strategies, considering the delivered subject, was disclosed.

Key words: *stress, stress coping.*

Introduction

Several tendencies could be distinguished in the researches on teachers' stress. One of them is researches into teachers' stress, analysing the so-called external stressors. It was identified that main sources of the teacher's stress were: too heavy workload, problems in cooperation with colleagues, poor administration and management (Kyriacou, 2001), too many roles (Austin, Shah, & Muncer, 2005), lack of support, excessive social expectations, lack of autonomy (Punch & Tuettemann, 1990), constantly changing requirements, too much of bureaucracy (paperwork), too little work with the class (Moriarity, Edmonds, Blatcford, & Martin, 2001), pupils' problematic behaviour, bad working conditions, lack of time (Abel & Sewell, 1999), etc.

Another tendency of researches on stress is researches on peculiarities of the very teacher's personality, determining intensity of the teacher's experienced stress. It is indicated that teachers themselves have a number of irrational beliefs that may contribute to emergence of stress (Forman, 1990; Bernard & Joyce, 1984). The ones to be mentioned are irrational beliefs expecting constant support and assistance from the environment. Other irrational beliefs are teachers' expectations that pupils must always behave properly, that there should be no negative emotions and conflicts at school, that parents are responsible for pupils' behaviour, the teacher cannot make mistakes, etc.

One more group of researches into stress goes deep into the analysis of stress coping strategies and mechanisms. Stress coping is understood as the individual's efforts, manifesting themselves at the behavioural and cognitive level, to cope with external and internal requirements when the existing resources are already exhausted or insufficient (Lazarus, 1993). The term coping is used irrespective of effectiveness or adaptivity of employed efforts. Lazarus (1993) distinguishes two main functions of coping: functions directed to the problem and functions directed to emotions. Problem-focused efforts are directed to solving the situation, changing the relation with the stressful event. The function of emotion-focused coping is to help to cope with arisen emotions without changing the stressful situation. Other authors (Carver, Schneider, & Weintraub, 1989) assess adaptivity and non-adaptivity of coping. They distinguish three groups of coping strategies: problem-focused stress coping, stress coping focused on seeking emotional support

and non-adaptive stress coping. Concretising stress coping methods, the following key fields of stress coping are detailed. This way theoretical stress coping models containing four, eight factors emerge (Bouchard, Sabourn, Lusser, Wright, & Richer, 1997). In this research the theoretical stress coping model containing eight factors will be followed (Lazarus, 1993). Researches into teachers' stress coping result in identification of links between stress coping strategies and the burnout syndrome (Griva & Joekes, 2003), emotional intelligence, satisfaction with life (Ignat, 2010), experienced stress (Hung, 2011; Austin et al., 2005, Bulotaitė & Lepeškienė, 2006).

Thus, researches on teachers' stress peculiarities and its coping strategies show the importance and relevance of the analysed problem. The teacher's work requires both certain professional skills and competencies, subject knowledge and emotional and psychological stability. The reality of the teacher's work – spontaneity in the classroom, the society's attitude analysing the teacher's activities, the teacher's work that is valued not according to efforts and competencies but according to the achieved result (Parkay & Hardcaste, 1998) – enables to ascribe the teacher's work to the most stressful types of work in the group of professions person-person. Researches demonstrate that 40% of teachers experience serious stress symptoms, which appeared due to too big workload, unsatisfied and insulting pupils and their parents (Austin, et al., 2005). There is an increasing number of teachers who are forced to address for psychotherapeutic support due to experienced anxiety, depression, "burnout syndrome" and psychosomatic complaints. Therefore, relevance of preventive measures for teachers is increasing. These measures could help teachers to use adequate stress coping strategies. However, creation of such measures requires empirical researches on the teacher's experienced stress and coping strategies. There is a lack of such researches both in Lithuanian and foreign scientific space.

Thus, this research aims to identify peculiarities of the teacher's stress coping, considering sex, years of teaching experience, delivered subject and the type of school.

Research objectives:

1. To disclose teachers' stress coping peculiarities.

2. To compare teachers' stress coping peculiarities with regard to gender, age, years of teaching experience, delivered subject, and type of school.

Research subject: teachers' stress coping

Methodology

The target group. The research was attended by 112 teachers from different Lithuanian schools, not randomly selected; 93 (83%) of them were female and 19 (17%), male. The target group was distributed to age groups according to age limits indicated by Gučas (1990): 27 (24 %) first maturity adults (between 24 and 34), which included 23 (85%) females and 4 (15%) males; 85 (76 %) second maturity adults (between 35 and 60), which included 70 (82%) females and 15 (18%) males. Teachers' years of service varies from 1 to 40 years.

According to the delivered subject surveyed persons were distributed into 4 groups: 41 (37%) language teachers; 13 (12%) teachers of exact sciences; 20 (18%) teachers of natural sciences and geography; 38 (33%) teachers of art and technologies.

According to the type of school teachers were ascribed to the following groups: 38 (34%) basic school teachers; 45 (41%) secondary school teachers and 28 (25%) gymnasium teachers.

Research methods. Teachers' stress coping was assessed using Ways of Coping Questionnaire (Lazarus, 1993).The questionnaire was translated to and back by bilingual researchers. The questionnaire consists of 50 statements, which are grouped into 8 subscales: confrontive coping, self-controlling, seeking social support, accepting responsibility, planful problem solving, distancing, escape-avoidance, positive reappraisal. The respondent assessed every statement using Likert type scale according to frequency of usage: 0 – not used; 1 – used somewhat; 2 – used quite a bit; 3 – used a great deal.

The Cronbach alfa coefficient of this scale 0, 82 is sufficiently high; thus, this scale is suitable for group researches (Vaitkevičius & Saudargienė, 2006). The reliability coefficient corresponds to the Cronbach alfa coefficient 0, 83 identified by other authors (Laranjeira, 2001).

Thus, key variables of this research are estimators of ways of coping stress.

Additional variables are gender, age, job experience, type of school and delivered subject.

Statistical analysis. Research data have been calculated employing 17.0 SPSS software. Links of stress coping indicators with sex, age, years of teaching experience were assessed using Spearmen correlation coefficient; comparison according to sex, type of school and delivered subject was made applying nonparametric Mann Whitney criteria.

Research Results and their Discussion
Descriptives of Research on Coping and Discussion

Data of each scale are given in Table 1. As it can be seen, teachers of this sample most often cope with the stressful situation using planful problem solving (describe behaviour directed to the analysis of the situation, efforts to change the situation), leaving accepting responsibility (describe behaviour, when the individual is responsible for his/her actions, plans) in the second place, and slightly more rarely using seeking social support (describe behaviour seeking information, actual support, emotional support). Most rarely teachers respondents of this group use escape-avoidance (describe behaviour when the individual refuses to solve the emerged situation, trust in miracles, wishes, fantasies) and confrontation (describe behaviour when the individual expresses his/her wishes, feelings, ascribes responsibility to others). The respondents use self-controlling (describe efforts to control their feelings and actions), positive appraisal (disclose efforts to learn from the emerged situation, positively restructure experience) and distancing (efforts to distance, not to treat the emerged situation seriously) moderately often.

Table 1. Coping Scales Descriptives and Comparison by Gender

Title of scales	General		Male		Female		Differences	
	M	SD	M	SD	M	SD	Mann Whitney U	p
Confrontation	1,03	0,46	0,87	0,60	1,06	0,42	614,0	**0,04**
Self controlling	1,44	0,43	1,21	0,42	1,49	0,43	563,0	**0,01**
Seeking social support	1,55	0,47	1,07	0,35	1,65	0,43	246,5	**0.0001**
Accepting responsibility	1,61	0,55	1,36	0,57	1,66	0,54	636,0	**0,05**
Planful problem solving	1,95	0,44	1,80	0,35	1,98	0,45	649,0	0,07
Distancing	1,34	0,47	1,29	0,61	1,35	0,44	862,0	0,8
Escape-avoidance	0,95	0,44	0,78	0,47	0,99	0,43	618,0	**0,04**
Positive reappraisal	1,35	0,46	0.97	0,31	1.43	0,44	324,5	**0,0001**

This only partially corresponds to other authors' research results. It was identified that the teachers' most frequently chosen coping strategy that coincided with the one of teachers of this sample was planful problem solving (Austin et.al., 2005). The most rarely used coping – escape-avoidance – coincides too. The biggest differences are in usage frequencies of accepting responsibility and confrontive coping. Teachers of this sample significantly more often use accepting responsibility and more rarely confronting than the said authors state. According to frequency of using coping strategies the results of teachers of this sample are closer to the data of research into families (Bouchard, et al. 1997). Frequency of using these coping strategies coincides: accepting responsibility, distancing, escape-avoidance, positive reappraisal. Usage of confrontation occupies an almost diametrically opposed position: Lithuanian teachers use it significantly more

rarely than the respondents who took part in the research of the said authors (Austin et al., 2005; Bouchard et al., 1997). Analogous researches into nursing in Portugal resulted in identification of dominating self controlling, planful problem solving and seeking social support coping and most rarely used escape-avoidance and accepting responsibility (Laranjeira, 2011).

Table 2. Intercorrelation Matrix of Coping Estimators

Title of scales	Con-fron-tation	Self cont-rol-ling	Seeking social support	Accep-ting respon-sibility	Planful prob-lem solving	Di-stan-cing	Es-cape-avoi-dance	Posi-tive reap-praisal
Confrontation								
Self controlling	0,002							
Seeking social support	0,31**	0,35**						
Accepting responsibility	0,20*	0,51**	0,38**					
Planful problem solving	0,04	0,27**	0,37**	0,19*				
Distancing	0,36**	0,35**	-0,18*	0,30**	0,22*			
Escape-avoidance	0,33**	0,28**	0,15	0,42**	-0,18*	0,35**		
Positive reappraisal	0,15	0,18*	0,48**	0,32**	0,57**	0,11	-0,02	

** Correlation is significant at $p < 0,001$ (two tailed)
* Correlation is significant at $p < 0,05$ (two tailed)

Thus, we can speak both about inter-cultural differences and about specificity of a professional activity in various cultures and possible health consequences caused by the employed coping strategy. Teachers of this sample, using planful problem solving, accepting responsibility, seeking social support more often and confrontation, more rarely, as if demonstrate the lack of manifestation of their needs, wishes. This would seem favourable for professional activities focused on the pupil and not on the teacher but at the same time this also shows insufficient identification of limits of responsibility. In the educational process this could result in fewer opportunities for learners to be responsible for their behaviour and achievements. Therefore, further researches into coping could be more specified, asking respondents about coping strategies used at work, relating coping strategies to professional deformation, etc.

As it can be seen from Table 2, weak statistically significant relations between coping indicators dominate. Recorded very weak relations are statistically non-significant. Positive reappraisal is related to seeking social support and planful problem solving by a moderately strong link. It can be assumed that seeking positive way out of the stressful situation, social support from the environment is used as well as situation analysis supplemented with its planned control. Accepting responsibility is related to self-controlling and escape-avoidance by the same moderately strong link too. Teachers' accepting responsibility means both bigger self-control and a pursuit to stand aside from the stressful situation, taking responsibility for this. There are two negative very weak links between escape-avoidance and planful problem solving and between distancing and social support. They explain the

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Albina Kepalaite

contrary of used coping strategies because distancing from the situation also means a weaker contact with seeking social support and stressful problem solving. Thus, identified links partially enable to verify validity of the content of the questionnaire. Besides, data given in Table 2 enable to evaluate how teachers, choosing one coping strategy, choose other coping strategies. It can be noticed that seeking social support and distancing are related to all other coping strategies; i.e., using one of these coping strategies, the teacher will be inclined to use all strategies. Positive reappraisal and confrontation correlate with the least number of coping strategies but their links are contradictory. The teacher, who more often uses positive reappraisal, uses other positive stressful situation coping strategies more often as well. The teacher, who more often uses confrontation, uses other negative stress coping strategies more often as well (distancing, escape avoidance). It could be considered that usage of constructive stress coping strategies activates usage of other constructive stress coping strategies and, analogically, usage of non-constructive stress coping strategy develops usage of other negative stress coping strategies. However, it can be noticed that with certain exceptions all stress coping strategies correlate with each other, including those ascribed to constructive and those ascribed to non-constructive. Hence, usage of certain one coping strategy, even if it is a positive coping strategy, does not ensure that the teacher will use other constructive strategies as well. However, it can be noticed that using constructive strategies, more varying stress coping strategies in general are used than in case of using non-constructive coping. This analysis of correlation coefficients verifies the idea that stress coping strategies should not be distributed into constructive and non-constructive (Laranjeira, 2011). They should be assessed according to effectiveness, dealing with stressful situation. And this depends on personality traits and possibilities, on the very stressful situation. Sometimes non-constructive distancing can help to see the stressful situation from aside and later solve it successfully (Folkman, Lazarus, Dunkel-Shettler, Longis, & Gruen, 1986).

Results on Coping Ways according to Additional Variables and Discussion

Socio-demographic data show that female teachers dominate in this sample. Male-female ratio corresponds to the usual ratio in Lithuanian educational institutions. As it can be seen from Table 1, female teachers use all stress coping strategies more often than male teachers. Distribution of stress coping strategies according to frequency of usage coincides for first two and two last positions. Women statistically significantly more often use accepting responsibility than men (p<0,05). Escape-avoidance and confrontation are coping strategies that are used most rarely but women's usage indicators are higher than men's (p<0,05) in both cases. There are significantly bigger differences in frequencies of using seeking social support and positive reappraisal. Although the latter is used by women more often, in the whole structure of used coping strategies positive reappraisal occupies a similar place as in the men's group. Meanwhile women use seeking social support more frequently than men and, moreover, in the general structure of using coping this coping occupies a higher position than in the men's group. This corresponds to the results of other researchers, who state that women more often use seeking social support (Chan & Hui, 1995). Although there are no statistical differences between men and women according to frequency of using distancing, but in the male teachers' group this coping is among the first three most frequently used coping ways. In the female teachers' group this coping is among last three most rarely used coping strategies. This corresponds to the results of other researches of Lithuania (Bulotaite & Lepeškienė, 2006) as well. Besides, these differences can be explained by psychological peculiarities of sexes. It is stated that women's social skills that are used seeking social support are better than men's. Men are more focused on activities, problem solving, and find manifestation of emotions more difficult (Реан, 1996; Bouchard et al., 1997).

Having identified differences in frequencies of using stress coping strategies between men and women, further calculations are made in sex groups separately. There were no young adults among respondents in this sample, besides, the majority of those who filled in the questionnaire

were second maturity teachers. Two significant negative links of age with confrontation, distancing and a positive weekly expressed link with positive reappraisal and planful problem solving in female teachers' group were identified (see Table 3). Based on that, it can be stated that the older the female teachers, the more rarely they use confrontation and distancing but they use positive reappraisal and planful problem solving more often than younger age female teachers. It means that as teachers grow older, constructive coping strategies start dominating and there are less non-constructive stress coping ways. Years of teaching experience partially reflect frequency of using coping strategies with regard to age. The more years of teaching experience, the more rarely female teachers use confrontation and the more often they use positive reappraisal. In men's group no statistically significant link with regard to age was identified but there is a negative relation between years of teaching experience and frequency of using seeking social support (r= -0,44, p <0,05). This means that the more years of teaching experience, the less male teachers seek social support, information, etc. in case of a stressful situation.

Table 3. Correlation between coping estimators and age, job experience among women

Title of scales	Con-fron-tation	Self control-ling	Seeking social support	Accep-ting respon-sibility	Planful problem solving	Distan-cing	Escape-avoi-dance	Positive reap-praisal
Age	-0,35**	-0,8	-0.02	-0,11	0,19*	-0,21*	-0,09	0,28*
Job experience	-0,29**	-0,03	-0,14	-0,14	-0,13	-0,06	-0,10	0,25*

** Correlation is significant at p < 0,001 (two tailed)
* Correlation is significant at p<0,05 (two tailed)

The majority of teachers of this sample were secondary school teachers and the minority were from the gymnasium. Different types of schools not only raise specific requirements for the teacher but also determine stressful situations that are characteristic and specific to them. It can be maintained that teachers working in different types of schools can also apply different ways of coping with stress. It has been identified that female teachers working in basic schools and gymnasiums and teachers working in secondary schools and gymnasiums do not differ according to frequency of any way of coping. Differences have been established between teachers of basic and secondary schools with regard to usage of self-controlling and accepting responsibility. Teachers of the basic school significantly more often use self-controlling (U= 9,95; p<0,001) and accepting responsibility (U=4,31; p<0,05) coping than secondary school teachers. Partially this corresponds to usage of coping by male teachers. Teachers of the basic school more often use self-controlling coping strategies than secondary school teachers (U=9,15; p<0,05). Secondary school teachers more often use seeking social support coping strategy than gymnasium teachers (U=9,6; p<0,05). Besides, secondary school male teachers significantly more rarely use accepting responsibility (U=5,5; p<0,001) and planful problem solving (U= 5,6; p<0,001) coping strategies than gymnasium teachers. Thus, differentiation of employed stress coping strategies is more significant among male teachers than among female teachers. It could be assumed that more frequent or rarer usage of stress coping strategies also reflects specific stressors, which depend on the type of school. Teachers of the basic school must put more efforts than teachers of other schools involving learners into the learning process. Meanwhile gymnasium teachers encounter different stressful problems in their work, the solution of which requires other mechanisms of coping. In any case it should be noted that as to this sample, essential differences are related to the so-called positive coping strategies.

Teachers may have to experience stressogenic situations, which depend not only on the type of school but also on the type of the delivered subject. Depending on the delivered

subject, classes are bigger or smaller, teachers and pupils have different motivation, which may be promoted by the teacher using energy and efforts. The majority of teachers of this sample are language teachers and teachers of art and technologies. The minority are representatives of exact sciences. In male teachers' group no essential difference between frequency of coping and type of delivered subject was identified. Meanwhile the biggest number of differences in female teachers' group was identified comparing stress coping by exact sciences teachers and art and technologies teachers. Representatives of exact sciences significantly more often than art and technologies teachers use distancing (U=47,5; p<0,001), escaping-avoidance (U= 100; p<0,05), confrontation (U=93,1; p<0,01). The latter coping strategy is used by representatives of exact sciences more often compared with natural sciences female teachers (U=32,1; p<0,05). Language teachers significantly more often than art and technologies teachers use planful problem solving (U=4,37; p<0, 05) and distancing (U=3,47; p<0,001). The latter coping strategy is also more often used by natural sciences teachers than art and technologies teachers (U=118,2; p<0, 05). Thus, most often differences occur comparing stress coping strategies used by art and technologies teachers with representatives of other subjects. They use distancing, escaping-avoiding, confrontation, planful problem solving more rarely than other teachers. It could be that teachers choose the delivered subject according to their relation with the environment, way of thinking, personality traits. Therefore, it is likely that there are links between the employed coping strategy and individual peculiarities, which could be the field of further researches.

Thus, it could be assumed that the analysis of stress coping strategies with regard to sex, age, type of school and delivered subject provides useful information which could be used counselling teachers on health, welfare and adjustment issues. However, the data of this research describe only the representatives of this sample that is why conclusions and identified regularities cannot be generalised for all teachers. Research results help to foresee fields of further researches. It would be relevant to compare peculiarities of stress coping among representatives of various professions, relating these researches to professional deformation. Besides, it is important to empirically and theoretically research effectiveness of coping strategies depending on the situation in which they are applied, not distributing ways of coping into positive and negative (Laranjeira, 2011).

Conclusions
1. Teachers of this sample most often cope with the stressful situation using planful problem solving, accepting responsibility and slightly more rarely using seeking social support. The respondents of this group use escape-avoidance and conformation most rarely.

2. Coping strategies are interrelated by different intensity and reliability. It was identified that seeking social support and distancing are related to all coping strategies and that positive reappraisal and confrontation correlate with the least number of coping strategies. It can be assumed that usage of certain ways of coping activates certain other ways of coping.

3. Female teachers use all stress coping strategies more often than male teachers. Coping strategies used in every sex group only partially coincide and correspond to general sample tendencies. The essential difference was established with regard to significance of using distancing strategy. In male teachers' group distancing falls among first three used strategies, meanwhile in female teachers' group this coping is among the most rarely used strategies in the whole structure of coping strategies.

4. Senior age female teachers more rarely use confrontation and distancing strategies but they use positive reappraisal and planful problem solving more often than younger age female teachers. Female teachers with more years of teaching experience more rarely use confrontation and more often positive reappraisal coping strategies. In men's group no links between stress coping and age were recorded but it was found out that alongside with more years of teaching experience male teachers seek social support and assistance more rarely.

5. A bigger differentiation in male teachers' group according to frequency of used stress coping strategies and the type of school was identified. Men working in the basic school

more often use self-controlling than secondary school male teachers. Secondary school male teachers more often use seeking social support than gymnasium teachers and they use accepting responsibility and planful problem solving strategies more rarely than the latter. Female teachers of basic schools significantly more often use self-controlling and accepting responsibility strategies than teachers of secondary schools.

6. In the male teachers' group no essential difference between frequency of stress coping and the type of subject was identified. Meanwhile in female teachers' group most differences were identified comparing coping strategies used by exact sciences teachers and art and technologies teachers. Art and technologies teachers more rarely than teachers of other subjects use distancing, escaping-avoiding, confrontation, planful problem solving.

7. Considering research results, teachers would find it useful to familiarise themselves with as many various stress coping strategies as possible.

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PECULIARITIES OF TEACHERS' COPING STRATEGIES

Summary

Albina Kepalaite
Vytautas Magnus University, Lithuania

There is an increasing number of teachers who are forced to address for psychotherapeutic support due to experienced anxiety, depression, "burnout syndrome" and psychosomatic complaints. Therefore, relevance of preventive measures for teachers is increasing. These measures could help teachers to use adequate stress coping strategies. However, creation of such measures requires empirical researches on the teacher's experienced stress and coping strategies. There is a lack of such researches both in Lithuanian and foreign scientific space.

Thus, this research aims to identify peculiarities of the teacher's stress coping, considering sex, years of teaching experience, delivered subject and the type of school.

The target group. The research was attended by 112 teachers from different Lithuanian schools, not randomly selected; 93 (83%) of them were female and 19 (17%), male. The target group was distributed to age groups according to age limits indicated by A. Gučas (1990):27 (24 %) first maturity adults (between 24 and 34), second maturity adults (between 35 and 60).. Teachers' years of service varies from 1 to 40 years.

According to the delivered subject surveyed persons were distributed into 4 groups: 41 (37%) language teachers; 13 (12%) teachers of exact sciences; 20 (18%) teachers of natural sciences and geography; 38 (33%) teachers of art and technologies.

According to the type of school teachers were ascribed to the following groups: 38 (34%) basic school teachers; 45 (41%) secondary school teachers and 28 (25%) gymnasium teachers.

Research methods. Teachers' stress coping was assessed using Ways of Coping Questionnaire.

Research results. Teachers of this sample most often cope with the stressful situation using planful problem solving, accepting responsibility in the second place, and slightly more rarely using seeking social support. Most rarely teachers respondents of this group use escape-avoidance and confrontation. Weak statistically significant relations between coping indicators dominate.

Female teachers use all stress coping strategies more often than male teachers. Distribution of stress coping strategies according to frequency of usage coincides for first two and two last positions. Women statistically significantly more often use accepting responsibility than men (p0,05).

Older the female teachers, more rarely they use confrontation and distancing but they use positive reappraisal and planful problem solving more often than younger age female teachers. The more years of teaching experience, the more rarely female teachers use confrontation and the more often they use positive reappraisal. In men's group no statistically significant link with regard to age was identified but there is a negative relation between years of teaching experience and frequency of using seeking social support.

Teachers of the basic school significantly more often use self-controlling and accepting responsibility coping than secondary school teachers. Teachers of the basic school more often use self-controlling coping strategies than secondary school teachers. Secondary school teachers more often use seeking social support coping strategy than gymnasium teachers. Besides, secondary school male teachers significantly more rarely use accepting responsibility and planful problem solving coping strategies than gymnasium teachers.

Representatives of exact sciences significantly more often than art and technologies teachers, use distancing, escaping-avoidance, confrontation coping strategies. Language teachers significantly more often than art and technologies teachers, use planful problem solving and distancing coping strategies.

Conclusions. Teachers of this sample most often cope with the stressful situation using planful problem solving, accepting responsibility and slightly more rarely using seeking social support. Coping strategies are interrelated by different intensity and reliability. Female teachers use all stress coping strategies more often than male teachers. Senior age female teachers more rarely use confrontation and distancing strategies but they use positive reappraisal and planful problem solving more often than younger age female teachers. A bigger differentiation in male teachers' group according to frequency of used stress coping strategies and the type of school was identified. In the male teachers' group no essential difference between frequency of stress coping and the type of subject was identified. Meanwhile in female teachers' group most differences were identified comparing coping strategies used by exact sciences teachers and art and technologies teachers. Considering research results, teachers would find it useful to familiarise themselves with as many various stress coping strategies as possible.

III. DISABILITY STUDIES

PREVENTION AND CORRECTION OF DISORDERS IN THE DEVELOPMENT OF THE "CORE" IN READER'S COMPETENCE OF CHILDREN WITH DISABILITIES (based on education of children with deep impairments of vision and hearing)

Elena Goncharova
Institute of Special Education,
Russian Academy of Education, Moscow, Russia

Abstract

The article is devoted to the problem of forming an ability to transform the meaning which the author has introduced in a text implicitly into own cognitive, emotional and creative experience of children with disabilities. The stages and methodical conditions for forming this ability in children with impairments of vision and hearing are described.

Key words: *disorders of reading of children, reader's competence, transition from situational to contextual speaking, children with special needs, children with disabilities, deaf-blind children.*

An introduction to the reading of children with disabilities is a complex and demanding task. Teachers and parents are making great efforts to teach a special child to read and understand what they read. They carry on a day-to-day struggle with difficulties encountered in every text. Unfortunately, these efforts are not adequately effective in numerous cases.

Instead of this struggle with difficulties in reading, it is offered to concentrate attention on prevention of disorders in reader's development, focusing mainly on initial stages of such development.

Reader's development (in restricted sense of the word) is understood as a process of development in ontogenesis of reader's competence.

Reader's competence is a very complicated functional system, the "core" of which is reader's or listener's ability to transform the meaning which an author has introduced in a text implicitly, into own cognitive and creative experience. To describe the structure of reader's competence, we will use the metaphor of "the wheel of reading".

The graphic model designed on the base of this metaphor (Figure 1) uses some concepts which are well known to psychologists and important for understanding the structure of reader's competence. The process of reading includes own experience of a reader (1), it is

provided by the functioning of almost all higher mental functions and neuropsychological structures (2), includes mastering of reading skills (3), implies that a reader is able to transform a text written by another person into own semantic and cognitive experience (4). We believe that such mechanism is a "core" of reader's activity.
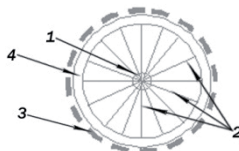

Figure 1. The structure of reader's competence

Under the favorable conditions for education of a normally developing child, such basic structure of reader's competence ("the wheel of reading") is formed by the end of elementary school. And its "core" is formed in preschool childhood (in a period before acquiring literacy) in activities which are joint-shared with an adult, implementing a cultural tradition of reading aloud and storytelling works of children's literature for children who are not reading yet.

"Falling out" of these traditions is one of the "social dislocations" which Vygotsky considered the key issue in the psychological nature of mental development in children (Выготский, 1995). Studies of the conditions for reader's development of deaf-blind children have revealed that congenital impairments of vision and hearing lead to such "social dislocation" at the earliest stages of reader's development (Гончарова, 2009b). We can reveal such social dislocation in the process of education of other groups of children with disabilities.

When the use of such cultural traditions of children's introduction to reading made in preschool childhood is limited or absent, serious disorders happen in the formation of the reader's competence "core".

In this case, four problems that are significant for diagnostics and, respectively, four variants of disorders in the development of the reader's competence "core" of children can be identified.

1. The failure occurred at the stage of situational speech development and, as a result, the background (the level of higher mental functions development and representations of reality) for the development of the reader's competence is not formed in a child.

2. A child went through the stage of situational speech development but the mechanism of text content transformation into own cognitive and emotional experience is not created, in other words, "the rim" in "the wheel of reading" is not formed.

3. The mechanism of text content transformation into cognitive and emotional experience is formed but methods of solving elementary reader's problems are mastered poorly.

4. The mechanism of text content transformation into cognitive and emotional experience is formed but the base structure of genre competence is not formed.

Such disorders in the formation of reader's activity "core" can combine both with low and high achievements in mastering technical skills of reading. That is why these disorders may be found even among children with excellent skills of reading and understanding of the texts at all stages of further education (Гончарова & Дмитриева, 2007; Гончарова, 2009a; Гончарова, 2009b).

Object of the research: prevention and correction of disorders in the development of reader's competence "core" for children with disabilities.

The aim of the research: based on education of children with deep impairments of vision and hearing to develop prevention and correction in the development of reader's competence "core".

Methods of the research:

– Theoretical analysis of the materials concerning prevention and correction of disorders in the development of reader's competence "core" for children with disabilities;

– Case study.

Methodological approaches to diagnostics, correction and prevention of the mentioned variants of reader's development disorders among children with disabilities were developed.

The most difficult situations were studied in the course of research conducted in the boarding school in Zagorsk (now town of Sergiyev Posad in Moscow Region).

The procedure aimed at formation of basic mechanism of reader's activity enabling the transformation of another person's experience described in the text into the content of personal cognitive and emotional experience of a child is described in this paper. This procedure was developed, tested and approved in the process of education of children with complex sensory disorders including partially sighted deaf and deaf-blind children with residual vision (hereafter the deaf-blinds) (Гончарова, 2006).

First of all, it should be noted that the need in such mechanism for teaching deaf-blind children to read can appear not in one moment since mastering of literacy by a deaf-blind child coincides with the very first initial step of mastering verbal speaking when pupils begin to learn coordinating their actions and observations with words. At this stage of education, reading is used in its non-specific function, as a means intended for serving a situational communication with a deaf-blind child and thereby for providing necessary conditions for the formation of vocabulary and grammatical system of their verbal speaking (Соколянский, 1999).

The materials for reading at this stage are words corresponding to objects that are used by deaf-blind children in their actions; phrases corresponding to these actions; and, at last, texts describing specific events and situations of their lives, that is, the situational, by its nature, speaking. To comprehend such speaking, there is no need for children to have any special mechanism of transformation of another person's experience into their own. The thing is that children themselves are heroes (the main characters) or immediate participants of the events described in the text. The text or its separate parts serve as a trigger for repetition of the previous experience of a child (who has read and recalled). On the basis of such reading children can acquire bright, comprehensive and emotionally colored notion of the events described in the text because the context of these events is their personal property.

The ability to completely, integrally and emotionally imagine the events where the child was not an immediate participant will be necessary when a teacher begins to offer stories describing events of other people's lives.

It is just the period of education when there is a special need in teaching children to recognize the following situation: children should understand that instead of common "mirror" that reflected their own lives there is now a totally new "device" by which they can see the experience and outlook of another person. Children must be taught immediately to use this new "device" adequately just the moment they start to use it.

In other words, at the stage of transition from perception of situational speaking to perception of contextual speaking three main problems must be solved:

1. in the course of this transition we should help a reading child to understand the change in their position concerning to the events described in the text;

2. to help a child recognize that the procedures and sets of reader's activity that were formed at the previous stage of education are useless for solving new reader's problems;

3. and, at last, to provide a purposeful formation of the procedures and sets of reader's activity that are adequate to this type of texts.

While solving the first problem, it should be taken into account that the problem of interaction between a child and an author arises for the first time just at the stage of transition

from situational to contextual speaking. This stage is believed to be the starting point for the formation of the true reader's activity of a deaf-blind child. It should be noted that at the stage of mastering situational speaking when a child is simultaneously the hero, the author and the reader of the text, the positions of the reader, of the author and of the hero of the text are not yet differentiated.

The first important qualitative change in the differentiation between positions of the reader and the author of the text in relation to the events described in the text occurs in the transition to working with the texts whose authors and heroes do not coincide with the reader. The author's position is a position of immediate participant or observer of the events described in the text. Meanwhile, the reader's position is a position of a person who is not a participant nor a witness of the events described in the text, and they can get notions on these events only from the text.

The child who starts learning to read at the stage of mastering situational speaking is in the reader's position for the first time only during the transition to perception of contextual speaking. This transition is just the moment when reader's development starts and the foundation of reading as cognitive activity is laid. The understanding of this change and the ability to differentiate between the author's and reader's positions is the first step in purposeful formation of the main mechanism of reader's activity, and it is the first step to the formation of reading as communicative and cognitive activity.

It was the reason why the section "Differentiation between positions of author and reader" was introduced into the first unit of the program for a cycle of lessons for deaf-blind children. This section is quite unusual for the programs of teaching to read (Гончарова, 2006).

This problem may be solved while working with the simplest (by their structure and content) texts describing the events from child's life.

In contrast to traditional forms of working with such texts at the reading and speaking development lessons, where questions addressed to the text content prevail, and a teacher uses these questions trying to achieve the right understanding of all words and grammar constructions in the text, we widely use in our lessons the procedure of "asking the reader about the context in the presence of the text's author".

At the first preparatory stage of learning the work is carried out with the texts that are well-known to children. The hero, the author and the reader of these texts are children themselves. By formulating the questions to context, we try to show the child, who is the hero and the author of the text, the advantage of such position (hero + author) compared with the position of a reader who has never been the witness or the participant of these events. The following is an example of such approach.

We prepared beforehand the texts for the reading lessons, and it was done individually with each pupil in the group. The texts contained the descriptions of some events or situations of the pupil's life that were unknown to other children. It may be the description of his family, flat, family celebration, any event that he has observed, etc. Usually we select a text with illustrations (if possible), for example, a story about the family of one of the pupils in the class.

Analysis of Case study
Oleg's family

Oleg has mommy, daddy and sister Lena. Mommy works. Daddy works. Lena does not learn. Lena goes to kindergarten.

To reconstruct the context of events described in the text the teacher asks the questions and gives tasks to readers in the presence of the text's author.

The following are the questions to the text mentioned above: What is the name of Oleg's mommy? What is the name of Oleg's daddy? How old is Lena? How old is daddy? How old is mommy? Has Oleg got a granny? Has Oleg got a grand-dad? Where do granny and grand-dad live?

It is clear that the reader who does not know Oleg's family cannot give correct answers to these questions. Only Oleg, the author of this text, can give the right answers. When the first reader makes mistakes or refuses to answer, the teacher offers the same questions or tasks to another reader and then the author. Then the results of every child's work are discussed.

Such procedure demonstrates the advantages of the text's author when they perform a task to reproduce the entire picture of the events described in the text, helps a child to make the difference between the reader's and author's positions of the text.

At the first stage of education children discover the difference coming from their accustomed position of the author and the hero of the text. At the next stage of education we create such conditions for children in order that they could experience the changes in their position towards the situation described in the text, and they should do it many times during one lesson. This procedure can give children a possibility to assess advantages and disadvantages of each position, to reproduce in great details the events described in the text including a context reproduction.

Such exercises gradually form in children understanding of the fact that the strategy "have read and recalled" used earlier is now useless because the texts now describe the events from the other persons' lives.

What activity of a reading child is adequate to this new type of texts? What activity of a child can give the bright, integral, emotionally colored notions of the events described in the text of new type? When responding to these questions, we supposed that such activity at initial stages of education may be a direct co-operation between a reader and an author who work together on teacher's task to recover the whole picture.

At the initial stage of education the teacher should organize co-operation of the reader and the author, the teacher being the mediator between them. The simplest way of organization of communication is to re-address to the author the questions initially addressed to the reader. By organizing the communication between the reader and the author, the teacher prompts the author (if the author is a child) the different procedures for elucidation of the text content (for example, the teacher recommends them to draw a picture, to show actions in gestures or by dramatization, etc.). Pupils master in such a way the roles of the reader and the author of the text. They become more and more independent and active in communication with each other and teacher's help is less and less necessary for them.

Such co-operation can be presented in a game that we conventionally name "the author's presentation". This presentation is created on the base of reading of the text which describes the events from the life of one of the pupils.

The essence of this procedure is that pupils reproduce the text content in an exterior form with the help of the author and under the direct control of the author. By controlling, directing and organizing the implementation of actions done by the readers for "the hero" in this presentation, the author of the text is gradually adding some content and tries to achieve the situation when actors reflect, as adequately as possible, the events which the author observed, experienced and described in the text. At this stage, reader's activities are simulated in exterior forms which are the most adequate to specific nature of reading as communicative activity where the experience of other people is acquired by the reader with the help of the text.

The next phase of the work is coming from the necessity of interiorization of communicative components of this activity.

The task was to transform a direct co-operation of the reader and the author of the text into an internal dialogue of the reader and the author mediated by the text. In our work we used the Galperin's theory of step-by-step formation of mental actions and notions (Гальперин, 2008).

Children must be learned to ask the questions about the context and to avoid the incompleteness of the text without a direct communication with the author, and they must do it when reasoning or thinking in the course of reading.

Our idea was to transform the co-operation of the reader with the author of the text into common way of mastering the text content. Then, by reducing and by interiorization of all its components, it is necessary to achieve the situation when communication of the reader with the author as well as performing actions for the hero occurs in the mind of the reader in the course of reading.

It is achieved by complicating conditions for communication between the reader and the author of the text in educational process. For example, the teacher offers the reader, as usually, to reproduce events described in the text but for the situation when communication with the author is delayed. The teacher organizes the implementation of reader's actions in such conditions and explains the need to think of content that is absent in the text or is presented in little details without author's help. At this stage it is necessary to teach children to correlate the results of their work with the text in order to avoid contradictions between the text and the introduced supplements. The author retains the control functions in order that the results of the basic tasks performed by the pupils do not contradict the content of the text. It is a new step in preparation of a deaf-blind child for reading of the fiction books for children. It is an important step in transformation of the direct co-operation of author and the teacher into "internal dialogue", "joint creative work of those who understand". An outstanding Russian philosopher and psycholinguist Bakhtin considered that the psychological nature of the perception of a literary text is coming from such joint creative work (Бахтин, 1979).

However, it is impossible to become a reader if a child reads only during school lessons. A child needs to be introduced into the world of books as early as possible. Since the children literature remains inaccessible to a deaf-blind child for a long time, it is necessary to create an artificial medium for every level of reader's development of a child. In these media, children, based on their own desires and in accordance with their own cognitive interests, may accomplish the "ways" of moving which they mastered at special lessons.

We offer to create three such "artificial" media, three spheres of reading which are referred to different levels of development of reading activity of a deaf-blind child.

The first sphere of reading should be created for children who know only the ways of comprehension of situational speaking. It will contain the books which describe the events and the situations of life of a deaf-blind child. Those may be books about their family, home, etc. The books are created by the child or by the teacher on the base of observations on child's behavior, gesture stories, pictures. The child is at the same time the author, the hero and the reader of these texts. The children like these books very much. Reading these books is just the same for children as walking in their own homes. Moving in this space does not require the development of special means, but it is just the place where they learn to walk, learn to look around, and where they acquire their first experience and learn to associate it with words, learn to see some familiar and accustomed images behind words.

The second sphere of reading should be intended for children who have already mastered the simplest methods of cooperation with author according to our program. This sphere of reading can be composed of books from the first sphere of reading of all other pupils. It must contain books written by teachers and other school personnel about their own life, their families, children, and various life stories. Such reading substantially broadens minds of children, and their notions about the nearest persons become more complete and adequate. It serves as a good basis for more close contacts with these persons. While reading such books, a child can perform all the skills of co-operation and interaction with the author or with the hero of the text which they acquired at the reading lessons based on our program.

The third sphere of reading includes adapted children's fiction books. The variants of adaptation may be different by the degree of its complexity and they may be made in view of a real speech development level of children. The transition to this sphere of reading supposes

that the child already has the ability to recover the context and the implication of the events described in these texts and does it mentally without author's help during the reading.

In our approach, a combination of special lessons and independent reading is described by the following rules:

✓ Each step in complication of material suggested for reading which requires change of structure and content of reader's activity of a child should be first prepared at lessons of reading with simple lexico-grammatical material familiar to the child.

✓ As soon as the child masters methods of mental activity needed for comprehension of the texts of new type, it is necessary to provide conditions for their fixing and realization in reading by free choice of a child, or in reading "with pleasure"

✓ As the child masters a new sphere of available reading and demonstrates a certain level of reader's independence, it is possible to go to the traditional work on "exploitation" of reading of such texts for solving educational and correctional problems.

In conclusion, it should be noted that this system has successfully been used in the boarding school for deaf-blind children in town of Sergiyev Posad for more than 20 years. It is aimed, first of all, at junior children who are able to read the simplest texts. The presented approach is used with some adaptation in the work with preschool deaf children who are able to read as well as with those children who have not yet mastered literacy and who have aural perception of speech. This approach can serve as an effective means for correction of the revealed disorders in the development of a reading competence "core" of children who have already mastered reading skills.

Conclusions

The presented phases and the method of working with children during special reading lessons, the libraries for children's reading by their free choice, the rules of combination of special lessons and independent reading of children represent the system of "detours" for forming the core of reader's competence of the most complicated category of potential readers.

Three "artificial" media, three spheres of reading which are referred to different levels of reading activity development of deaf-blind children could be created.

The first sphere of reading should be created for children who know only the ways of situational speaking comprehension. The second sphere of reading should be intended for children who have already mastered the simplest methods of cooperation with the author according to our program. The third sphere of reading includes the adapted children's fiction books.

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PREVENTION AND CORRECTION OF DISORDERS IN THE DEVELOPMENT OF THE "CORE" IN READER'S COMPETENCE OF CHILDREN WITH DISABILITIES

Summary

Elena Goncharova
Institute of Special Education, Russian Academy of Education, Moscow, Russia

The article is devoted to the problem of prevention and correction of disorders in reader's development of children with disabilities.

The process of reader's development in ontogenesis is described in the system of notions of Vygotsky cultural-historical psychology and is understood as formation of reader's competence – a special psychological functional system the "core" of which is an ability to transform the content of a text into the content of reader's experience. The "core" of reader's competence of normally developing children is formed in activities which are joint-shared with adults, implementing a cultural tradition of reading aloud and storytelling the works of children's literature for children who are not still reading. When the use of such cultural traditions of introduction of children to reading performed in preschool childhood is limited or absent, serious disorders happen in the formation of the reader's competence "core". The extent and the nature of disorders in the development of the reader's activity "core" may differ depending on the stage of the development where the "failure" happens and on the components of its structure which turned out to be the most vulnerable.

The process of formation of the reader's competence "core" was studied in the course of its purposeful formation in the most complicated category of potential reader's – deaf-blind and partially sighted deaf children. It was shown that the starting point in the development of the reader's competence "core" is at the stage of the transition of a child from situational to contextual speaking. In the course of teaching a "special" child it is necessary just at this stage to create conditions for the formation of initial forms of such subsystems of reader's competence as ability to dialogue with the author, co-operation with the hero, ability to cope with the different problems described in the text.

The article presents the methodical approaches needed to solve this problem. These approaches were developed, tested and approved in the process of education of junior children with complex sensory disorders.

Methodical approach which helps children to recognize that procedures and sets of reader's activity that were formed at the previous stage of education are useless for solving the new reader's problems is described. Other methodical approaches enable a teacher to form a set for interaction of a child-reader with the author of the text. The procedures for organizing such an interaction, which helps the child-reader holistically and fully represent the content that goes beyond his personal experience are disclosed. The successive steps for the interiorization of the interaction of a reading child with the author of the text and for conversion it into an internal dialogue are outlined.

It is shown how mastering new reader's abilities can be combined with reading by free choice of a child prior to the moment when this child will have abilities to read children's literature. The three "artificial" media, three spheres of reading which refer to different levels of reading activity development of a deaf-blind child are presented. The rules of combining special lessons with child's reading by free choice are described.

The presented system of the "detours" for forming the core of reader's competence has successfully been used in the boarding school for deaf-blind children in town of Sergiyev Posad for more than 20 years. With some adaptation, it is implemented in the work with preschool deaf children who are able to read as well as with those children who have not yet mastered literacy and who have aural perception of speech. The system can serve as an effective means for correction of revealed disorders in the development of the reading competence "core" of children who have already mastered reading skills.

STRUCTURE AND DIRECTIVENESS
OF ATTITUDES TO DISABILITY

Irena Kaffemaniene, Margarita Jureviciene
Siauliai University, Lithuania

Abstract

The study seeks to answer questions: whether the integration of the disabled changes public attitude to people with disabilities? And if so, what is the direction of public opinion change? Representations of disability, understanding of disabled people's needs and personality traits are analysed using interview and content analysis methods. The study involved students whose future profession is not related to the disabled. The structure of attitude to the disabled is revealed based on the analysis of theoretical (clinical and social) models.

Key words: *disability, attitude, social representation, stereotypes, social model, clinical model.*

Introduction

Relevance of the problem. Historically formed attitude to disabled people is negative, stigmatising, based on the clinical model, emphasising deviation from the norm, health disorder (diagnosis), helplessness, inability, etc. (Ruškus, 2002; Pivorienė, 2003). In modern scientific researches the clinical model is severely criticised as not corresponding to the person's social essence, emphasising biological reasons of disability, disability as a personal inability problem. The social model of disability is vigorously defended. It emphasises that negative attitude towards the disabled is formed by society, integration and social interaction are emphasised while limitations and restrictions determined by disability are kind of taken to the background (Ruškus, 2002; Viluckienė, 2008; Žalkauskaitė, 2012 et al.). The ideas of participation and empowerment inherent to the social model of disability indicate that success or failure of social integration depend not on the existing disability and restrictions caused by it but on the interaction of the environment with the disabled individual (Ruškus & Mažeikis, 2007).

Scientific researches (Žalkauskaitė, 2012) verify that negative attitude is in fact formed in the society through various social institutions (e.g., the media) and are not determined purely by disabled persons themselves, their behaviour or other peculiarities. On the other hand, scientific researches prove that attitude to disability is a two-way phenomenon: on one hand, the society constructs stereotypical representations of disability, on the other hand, the disabled themselves convey self-devaluing attitude to society (Gailienė, 2007; Kaffemanienė & Vinikaitytė-Ruškė, 2007; Ruškus, 2002 et al.).

The social model, which particularly focuses on nurturance of dignity, social interaction and empowerment of a disabled person, is of course humanistic and its purpose is to form positive attitude in society with regard to the disabled. However, the critics of the social model of disability state that this attitude inadequately elucidates and forms the conception of

disability that does not correspond to reality, is idealised and, according to Viluckienė (2008), "out-bodied", in which limitations and restrictions experienced by the person are derived only from social barriers formed by society whilst an affected and badly functioning body, according to the author, is given somewhat secondary importance.

Thus, the analysis of scientific literature reveals two most distinct existing models of attitude to disability. Attitude to disability is formed by numerous factors. These are dynamic political and economic changes, stereotypes transferred from generation to generation and formed or enhanced by the media (Žalkauskaitė, 2012 et al.), researches into social reality of the disabled and discussions as well, influencing qualitative changes in disabled people's lives and attitude towards the disabled, taking place in society (laws on integration, equal opportunities, etc.). However, the question remains: Does integration of the disabled, provision of equal rights and other changes of life alter the attitude of society to disabled people? If yes, than to which direction is societal attitude changing? Problem questions are: What models of societal attitude to disability do existing notions of disability of studying youth reflect? What stereotypes are reflected in students' attitude to disabled persons?

Research subject: structure and directiveness of attitude to disability in students' reflections.

Research aim: to identify structure and directiveness of attitude to disability on the basis of clinical and social models.

Objectives of the empirical study:
1. To analyse students' existing knowledge, understanding, notions of disability.
2. To reveal research participants' emotional assessment of disability.
3. To analyse research participants' behaviour with regard to disabled persons.

Research sample. The research was attended by 39 third-year students of Šiauliai University, whose academic programme was not directly related to future professional activities in the communities of disabled. Students were chosen as research participants because they were academic youth, the part of society which had certain knowledge and experience and should possibly represent advanced tendencies of societal attitude to the disabled.

Research methodology and methods. Social representations are systems of values, ideas and behaviour, codes of orientation and communication, based on classification and naming of individual and group experience (Manstead & Hewstone, 1995). According to Goodenough (qtd. in Pruskus, 2004), the analysis of cultural phenomena (concepts, relations, values, norms) enables to explain what exists (knowledge and comprehension of the phenomenon or the content of representations and concepts), how they are interrelated (relations), how they are valued (values), and what the behaviour is like (norms). Based on that, the conception is followed in this research that attitude to disabled people is a multidimensional construct, encompassing: 1) knowledge and comprehension (representations) about disabled people and existing experience of communication with them; 2) emotions arising while observing physical, social, psychological difficulties experienced by disabled people, 3) actual behaviour with disabled persons (readiness to help them or their rejection, etc.).

Empirically identifying the structure of attitude to disability, the methodology of qualitative research was chosen. Research data were collected employing the semi-structured group interview method. Research participants were given 16 pre-prepared questions. Depending on the situation, during the interview several additional questions were given, seeking to clarify and better understand the imparted position. The duration of the interview was about 50 minutes. The research was conducted in two sessions with two research participants' groups separately (the first group contained 19 participants; the research took place in September, 2012; the second group consisted of 22 participants and the research was conducted in September, 2013). Processing research data, *content analysis* of the interview was conducted.

Research Results

Knowledge and understanding of disabled people. According to Žalkauskaitė (2012), societal attitude, expectations and social behaviour towards the disabled are influenced by disability stereotypes formed in the media and transmitted to the society. This opinion is verified by students' statements how they found out about such people: only one third of research participants have direct communication experience. The majority of students stated that they had learned about the disabled from the media (press, TV, the Internet) and from lectures at the university. Answering the question what disability means, some research participants spontaneously named diagnoses (*multiple sclerosis, paralysis, Down's syndrome, Parkinson's disease, Alzheimer's disease, autism*), others mentioned visual, hearing, intellectual disabilities, physical disabilities [*The first representation … is a person sitting in a wheelchair. / straightaway I see a man in a wheelchair, people who lost certain limbs after traumas, a blind person*], whilst the majority tried to explain the concept and most mentioned restrictions, inability, helplessness (see Table 1).

Table 1. Category *Conception of Disability*

Subcategories and content of interview texts
Physical restriction, limitation, inability
Disability is a certain shortcoming hindering the person from living a full life. / Inability to move. / A man who cannot do something. / …a disability is when a person is restricted in some way and that he/she cannot live fully like a normal person… and has a certain hindrance meeting his/her needs. / … disability is an inability to meet one's certain physical needs / … disability is the factor hindering a person to live a full life and feel a full member of society. This is the factor, hindering a person from performing certain jobs…
Restriction of communication
.. he finds it difficult to adapt in the society / They find it very difficult to find friends… that is why they are pleased if they get attention from surrounding people. / Others avoid to talk with her… / Like us they need entertainment, but very few are offered to the disabled.
Burden, inconvenience to the society
It is very difficult to live with such people because they require much communication… / It is very difficult for a healthy person to understand that others cannot move; / … it is very difficult with such people, … he is a big small child, his children change diaper for him. / …he lives as if in another world, there is chaos at home, communication is very difficult,… / The majority of people avoid communication with disabled people …
Negative inclinations of disabled people (homelessness, alcoholism)
… I do not tolerate such disabled people who beg in order to get some alcohol… / Alcohol is most often chosen by those who are not supported by their relatives, family or become disabled because of alcohol.
Disability as a gift and / or punishment
Simply this disability… this is either a gift or a punishment. Let's say if we speak about the acquired disability. For some people such things improve life, for others, worsen. It would be very difficult to give kind of the very definition of disability; / /But I think that most often disability for the person is like punishment.

Although a share of students associate disability with the person's negative inclinations, which they condemn, and with subsequent social problems (alcoholism, homelessness, begging, etc.), anyway, some of them derive these problems from indifference of the environment to the disabled person and this slightly reminds of statements of the social model of attitudes to disability about problems caused by insufficient social interaction.

Students negatively assessed social situation of disabled people [... *very poor; / I think the state pays too little attention and provides too little funding...*]. Only a small share of students who took part in the survey envisage positive changes [...*maybe is slightly improving*].

Research participants distinguished the most important needs of disabled persons (see Table 2).

Table 2. Category *Understanding about Special Needs of Disabled Persons*

Subcategories and content of interview texts
Needs of attention, psychological support *Such people require very much patience, mostly they require attention; / Require ... devotion; / ... certain support / maybe some need that psychological support, so that they can... adapt, particularly in case of some adversity and if you become disabled / Understanding of surrounding people; / ...versatile trust.*
Needs (lack) of tolerance from the environment *... Surrounding people look at the disabled unpleasantly, often gossip... / ... the dominating attitude ...still is that disabled ... are kind of classified as a closed group of people who have to communicate only among themselves or stay at home. ... / ...most people treat them coldly, children laugh at them, adults also do so. / I am angry when ... a paralysed person wants to get on a bus and the bus driver shuts the door thinking that the person is drunk.*
Needs of technical assistance and adjustment of the environment *Such people need technical means so that they could be more self-dependent. / Because they don't have necessary apparatus which facilitate their disability. /Non-adjusted buildings. / ...sidewalks... in some places the kerbs are very high, it is difficult both to go down and up. / It makes me angry that there is no access in the shops for the disabled..., thresholds are not adjusted for such people ... there is no special handrail where to recline or fasten.*
Needs of social support *Really, the disabled receive support but it depends on the level of disability. / I think the state gives not much attention and money for the disabled; therefore, the majority become homeless or their subsistence level is very low,.... / ...of occupation, availability of social services / It is not a secret that most often they lack money.*

Students first of all associate disability with the needs of support […*the necessity of constant care; / Someone must help to make meals, and to take him/her somewhere, to bathe, ... / to cross the street*, etc.].

Many students emphasised that disabled people considerably lacked attention, support from the environment, tolerance. Quite often environment adjustment problems were mentioned as well as social support needs that had not been met. On the other hand some students think that maybe the disabled lack occupation and possibilities to express themselves but at the same time they lack motivation [*The fact that you are disabled doesn't mean that you can't live normally and that you have to sit and stay at home, do nothing...*] and self-confidence [*I think that some lack self-confidence, positive thinking / joy of being together...*].

It is likely that the attitudes of the society to disability are formed under the influence of both historically determined stereotypical clinical representations and being influenced by socialisation of gender roles; i.e., the process during which the individual constructs cultural differences of gender roles (Pruskus, 2004) and stereotypes of gender roles with regard to the desired men's and women's place in the society, their functions and social tasks (Valackienė

&, Krašenkienė, 2007). This is also verified by the content of research participants' reflections on the impact of disability on the man's and woman's life quality, which typically reflects stereotypes of gender roles, male and female behaviour models, relations, norms, values, different standards and rules of expected behaviour (Pruskus, 2004; Valackienė & Krašenkienė, 2007). The content of research participants' reflections about male-female differences in the disability situation are given in Table 3.

Table 3. Category *Understanding the Differences in the Impact of Disability by Gender*

Subcategories and Content of interview texts
Disabled men characterized by higher levels of psychological vulnerability *Men are really more sensitive, more vulnerable because they are dependent on others. / Men find it more difficult to accept help, pity… / …I think men break more often if they become disabled. …. they find it more difficult to face up this situation. … Maybe he feels more humiliated if the woman is looking after him. / … it may seem to him that he has lost his manliness, his capacities, …/The man's nature requires him to be strong, responsible for welfare and safety of his family members. When he loses these capacities, he feels inferior, useless and unnecessary for anyone. Often this can lead to depression or even suicide.*
Disabled woman is more psychologically resistant *… the woman is more optimistic and accepts support. / The woman is a stronger personality. /…she steps over the disability. Women always more emotionally experience everything than men and this much better than to keep everything within oneself, which is not the case with men. / … women are caring, that is why they want to be taken care of. /… women accept the disability faster because of spiritual strength. / … women accept this much easier.*
The impact of disability depends on personality traits *I think both genders can break in any case… / I think this depends on the very personality … psychological immunity, temperament, character, social environment, family, culture and even politics. / I think there isn't' any clear psychological difference between the man's and woman's disability. / … the disability is equally painful for both sexes. / I think both sexes find it difficult to accept themselves being different than others.*

Differences of the impact of disability by gender reflect strong stereotypes of gender roles. In the opinion of research participants, psychological crises caused by disability and depression break men more often than women because they devalue men's attitude to themselves as to the ones who require other person's help and care whilst women, unlike men, are care-giving that is why they expect other people's care. According to research participants, in general, in the situation of disability women differently from men are stronger, more resistant and find it easier to cope with problems related to disability. According to Matkevičienė's (2003) research data, TV announcements are dominated by a self-confident, qualified, sincere, good-willing, intelligent and calm man; in addition, men are attributed such traits as intolerance, coldness, carelessness and weakness; aggressiveness, cruelty, alcoholism, dishonesty, etc., whilst the woman is shown as loving, sincere, kind, intuitive, attractive, emotional, tolerant and obedient. Research participants' statements reflect namely such or similar representations about disabled men and women. The disabled man is treated as more vulnerable than the woman namely due to stereotypes of the man's role. The content of interviews shows that disabled homeless people and beggars are men who have lost everything because of their vices (e.g., alcoholism). Thus, the content of research participants' reflections on different impact of disability on men's and

women's life reflects both stereotypes transferred in the family from generation to generation and representations formed by the media. Matkevičienė (2003) notes that stereotypes prevailing in the media about men's and women's roles (women do the housework, bring up children, while men maintain the family) can determine psychological crises of men and women in these cases when the person's lifestyle, activity, functions in the family do not correspond to the values of the society and expected behaviour. Based on statements of interview participants, when the man becomes disabled, his self-respect and dignity particularly suffer because changes in the behaviour no longer correspond to the expected behavioural model and status in the family (strong, self-dependent, self-confident, maintaining the family). On the other hand, based on research participants' reflections, changing approaches towards the woman's role and status in the society can be envisaged: the woman is no longer treated only as the man's dependent, she is also treated as a strong personality who is able to manage her life herself, seek career, although the society treats these pursuits controversially: existence of such phenomena is acknowledged but the woman's career goals, leadership are valued as copying of the man's behaviour, which contradicts to the woman's nature (Purvaneckienė & Purvaneckas, 2001).

Emotional reactions observing disabled people. Research participants' reflections on disability disclose a rich scale of emotions, ranging from neutral reactions to anger (see Table 4).

Table 4. Category *Feelings with regard to Disabled*

Subcategories and content of interview texts
Sympathy: *I feel sympathy in the corner of my heart… / When I see a disabled person in the street, I always pay attention to him/her, though it seems that I don't want to, but, anyway, my eyes turn to the disabled but that glance is really full of sympathy, … / … just some of them are really disadvantaged in life and I pity such people*
Respect: *Respect for that person if, for example, he/she is shopping in the shop sitting in the wheelchair; I am pleased that the disabled person tries to do everything himself/herself, remain self-contained. / I will always respect the disabled, when inside they will feel pain … but they will not show this. /… people of such fate need respect, good willingness and being together.*
Fear: *Fear, all kinds of ideas come into my mind, if something like this happens to me or my close people … / Fear for close people, family.*
Guilt: *I feel guilty.*
Anger: *I have negative feelings when homeless people are begging near the shops; it seems that they are manipulate their disability. / Others pretend to be disabled. /… I used to see him begging, sometimes he would shout at people so that they give money for him, … but as soon as he would get money he would go to buy alcohol. /…. Quite favourable conditions are created for them to behave so; even the police don't do anything.*
Neutral reactions: *I react normally. / In general, like with a normal, simple man: if he/she is attractive* [I feel] *attractiveness, if not, then nothing. /Reaction depends on what kind of person you will meet… / Well, it is difficult to tell if I tolerate or not… / I treat this problem philosophically. / …I always communicate with them like with normal people…*

Research participants' neutrality towards disabled people may be treated as the most natural reaction [*I react normally... / depends on what kind of person you will meet...*]. However, the commonly expressed emotion experienced observing disabled persons is sympathy, arising due to the formed representation that the disabled is helpless, disadvantaged in life, thus, worth

being pitied. Alongside with pity and sympathy, the feeling of respect is addressed to the disabled, related to the person's efforts to be self-dependent, cope with difficulties caused by disability. A share of research participants felling sympathy and respect also feel fear for their own or close relatives' health, and part of them, the feeling of guilt that is difficult to explain.

As to negative phenomena related to the disabled, students mentioned that disabled people manipulated surrounding people's compassion, requirement of help [*... but on the other hand, they use their situation in the society and manipulate people who pity them. / ... mostly require attention, maybe sometimes want to use this*], begging, neglect of oneself and one's future [*Others are lazy to tidy, benefits are insufficient to subsist on them, thus, some also beg*]. Research participants' reflections, observing public behaviour of disabled people, distinguish themselves by negative content: they use their disability, manipulate people's pity, beg, drink, etc. In this case Žalkauskaitė's (2012) statements are verified that individuals' experiences arising having encountered the disability are interpreted as experience of real threats (e.g., of disabled people's deviant behaviour, etc.) and as an outcome of social interaction.

Students' different emotional attitude to disabled people is disclosed through their representations about personal traits attributed to the disabled (see Table 5).

Table 5. Category *Personality Traits Attributed to Disabled People*

Subcategories and content of interview texts
Sensitivity related to maintaining one's dignity, fellow-feeling *They are more sensitive, we have to think it over when to provide help, show more attention, take care. / Not to make them feel disabled, let them do everything themselves. / ...the disabled will never want you to show pity for him and express it. / ... they themselves are very helpful.*
Spiritual strength of disabled *The disabled ...seem strong, they live being resigned to disability... / You may feel jealous for many disabled – they are strong people... /...earn for the living even with big physical disabilities... /... disabled ...may be proud of much stronger inner capacities / ... they trying to be as independent as possible / they don't show any feelings of being unhappy or joyless...*
Disabled as a spiritually rich person *Wonderful companions... / I have a granny who is weak and bed-ridden. She is a wonderful talker... tells various interesting stories from her hard life. /When we met we talked long ... / the disabled are very warm personalities.*
Enjoying the life of a disabled *I have a relative with the Down's syndrome. She is a very kind and joyful girl. / ... are able to be happy for small things / ...don't lack a sense of humour... / ... very good fun ... to see that they anyway ... enjoy life. / ...there are disabled people who don't have hands, legs, sit in a wheelchair but have needs, want to enjoy themselves, talk. / ... there are such disabled who rejoice and enjoy life's pleasures. /... he is cheerful and self-confident. / ... namely these people enjoy life more than we.*

In the opinion of the part of research participants, the disabled do not differ from other people, have various needs and hobbies [*I really can say that despite their disability they are like others: they are happy, laugh, talk, learn, work, are angry, sad, yearn, read, write, etc. / They are like us, go to work, have different hobbies and always like to communicate. / They*

are normal people, foreseeing their possibilities and never overstepping them... / Such people learn to live with the disability, do sports like all healthy people...].

In this case students' reflections are intuitively grounded on *the perspective of strengths* (Saleebey, 2006 et al.) and the belief that the disabled have many strengths: talents, abilities, which describe them as persons who are capable to construct quality of their social functioning. Strengths, attributed by students to the disabled, are not only their spiritual strength, the ability to adapt, change, find new capacities, gifts and even talents in oneself [...*such people seem strong, they live having accepted their problem; /... disabled person can be proud of bigger inner capacities*]; but also optimism, joy of life [...*they know very well how to enjoy small things / ... don't lack a sense of humour...*].

Part of research participants expressed the opinion that disabled people distinguished themselves by certain abilities [*He was a very talented child, drew wonderfully and already being 5 years old spoke fluent English; therefore, I formed an impression that autistic children were very talented. / Certain people who have disability are very gifted....there is a man in a wheelchair who is known in all area for painting pictures. / There are many those who are talented*].

According to data of content analysis of interviews, students have formed representations that these people have many positive traits. Disabled persons' strength, optimism and joy of life seen imposing for research participants. Attribution of positive traits to the disabled can be treated in two ways: both as experience of their communication with these persons and as a direct impact of the media demonstrating disabled persons' activeness, talents or achievements in professional, sports, creative activities or other self-expression areas.

Being asked to disclose ideas and feelings imagining themselves as disabled, research participants disclosed not nearly enough optimistic representation. Reflections on ones' own or another person's disability have a common feature that both describing how the disabled person feels and describing their feelings in case of their own disability, students mentioned that adaptation is determined by traits of the very personality, attitude, complexity of disability, adjustment of the environment, etc. Many repeated the opinion which was expressed earlier, that disability was a restriction, loss of self-dependence; hence, inconvenience both for oneself and others[*Very cruel thing to ask others for help, aggravate them... / The most terrible thing is movement disability because you waste other people's time, ask for help if you can't go to certain places. I would not like to load others with my concerns*].

However, research participants have contradictory perceptions of ones' (imagined) or another person's disability. Their opinions differ as to how the disabled person feels, what the disability means to the very disabled person and how research participants feel, what emotions they impart imagining themselves as disabled.

First, it is necessary to note that part of students expressed rejection reactions to the proposal to imagine themselves being disabled [*I never imagined and I don't want to imagine! / No, I never even dared to imagine that I was disabled / I never thought about this ... I dismissed any ideas how it would be if it were so. / I don't think. / No, I didn't imagine. / I've never imagined myself being disabled because I don't think I would like to imagine. / I am trying not to think when I am healthy but I think no one is protected from this..*].

Being asked to imagine their disability, the majority of research participants were shocked and expressed negative emotions *[It would be difficult, unpleasant, terrible]*. It would be most unpleasant not only due to lost self-dependence but also because the surrounding people would express pity for them [.... *Other people's pity..., those looks when they pity... I would feel uncomfortably. / When others pity you, you want to cry, you want others to say that everything will be all right. / Causes negative reactions... Sadness, anger. / Reaction that others pity you; you want to oppose. You want support, comfort but when there's too much of this,*

then that's the end]. Few respondents, just one or two, expressed the idea that if they became disabled they would find positivism, optimism or some other particular abilities [*Maybe I would realise myself by means of art or singing, this way I would express my emotions being disabled. / Well, let's say, I am sitting in the wheelchair but I can do something else what others can't*]. On the contrary, some think that in such situation they maybe wouldn't be able to adapt, would raise the question of meaning of life [*...if it happened so, I think I would break / Sometimes I think, ... , whether I would be able to stand such difficult test... /... It would be very difficult to accept this / ... I won't want to live... / ...maybe only after a long time, having coped with myself, motivation to move forward would appear*].

Thus, ambivalent approaches to disability come to prominence not only describing emotions arising from observation of disabled persons but also imagining oneself as disabled. On one hand, the disabled is represented as unable, restricted in his helpless body, on the other hand, such traits as spiritual strength, optimism, talents are attributed to such person. According to Ch. Galehr (2005, qtd. in Žalkauskaitė, 2012), the majority of people have very little or no direct contact with the disabled person, they do not see differences of disabled persons' representation in the media and in real life. That is why some excessively devalue them while others form an excessively optimistic representation of disability. Like any other part of the society, disabled people do not necessarily distinguish themselves only with positive traits, particular abilities or achievements. This is also reflected in participants' reflections in which the disabled person is perceived not only as having abilities and capacities but also as restricted and disappointed; for some research participants the representation of disability pertains to homelessness, begging, alcoholism.

Behaviour with regard to disabled people was explored in the aspects (categories) of *support provision* and *personal relationships with disabled people*.

Category *Support for Disabled People*. The majority of students stated that they would provide help for the disabled although they had never been in situations like this. However, there were different opinions about this. Some provide assistance to a disabled unconditionally, while others refused to provide assistance to people with mental disabilities.

Unconditional support for disabled. Some stated that they would provide help straight after noticing that the disabled found it difficult to cope with certain hindrances [*... if the man crosses the street and is blind, I would help to cross it. / I could help to cross the street, push the wheelchair*] or do housework [*I wouldn't refuse to help doing the housework. / I could help physically, that is take something, lift, take somewhere, bring from somewhere, dress, put on the shoes*]; would do this unconditionally [*there wouldn't be any doubt*], with pleasure [*I helped and I felt good / without any discomfort / this is really not difficult*].

It seems for some research participants that it is necessary not to offer help to the disabled if he/she does not ask [*I understand that they feel uncomfortable that people keep offering help for them all the time*]..

Rejection to provide help for disabled. According to others, support depends on the situation [*I think that it all depends on the situation, the person, his/her disability. / Depends on the situation and what would be expected from me. If it was short-term help, I would help*]. The majority of students stated that their behaviour would depend on the type of person who needs help. They are most inclined to help people with physical (movement) disability [*If the person has a physical disability, I would really help*]. But almost all doubted if they would help the person who is mentally disabled [*... in case of mental disability ... you don't know what to do, how to help…. / I would be afraid of the person with mental disability, you never know what he/she may think or do. / However, if we speak about mental disability, then my nerves and my time are more important for me/ / If this is not related to my family and close relatives,... I don't have to do this*].

Attitudes to personal relationships are reflected in research participants' considerations about possibilities of friendship and marriage with the disabled person (see Table 6).

Table 6. Category *Attitudes to Possibility of Close Relationships with the Disabled*

Subcategories and content of interview texts
An equivalent communication   *I could be friends with him, marry him because he is the same person. In my opinion, such friendship has many advantages. You can learn a lot, get a different view to the world, ideas, thoughts. / Yes, I think I could. /...of course it is difficult in the beginning but later you adjust to the person. / There is no difference if the person is with or without disability, his inside is important. / ...that person would be happier if he knew that somebody communicated with him. Thus, there is mutual benefit.*
Possibility of close relationships depends on disability *and other circumstances*   *However, friendship would depend on that person and his/ her disability. / I don't know, maybe this would depend on the type of disability ... / ... however, emotional disabilities scare me, thus, I doubt whether I could start a conversation. / Although again the question is very abstract: I don't tolerate mental disability in any way, I will never keep in touch with such persons. / It depends on what friendship we discuss: about friendly relationships or love relationships. In both cases I would make friends only if I knew that person or if I were in love with him before he had acquired disability.*
The doubt being on close links with the disabled   *... I don't know if I could socialise with that person because it seems to me that I would feel uncomfortable ... / I couldn't say now because I don't know how it would be. / At the moment I even can't imagine if I could or not. /If I decided to marry a disabled person, I would have to answer numerous questions before that...*
Rejection of close relations with the disabled   *... if he were sad, always unsatisfied with something, I think I couldn't live with such person because I would feel sorry ... / I think I couldn't be friends with the disabled person or communicate ... / I think that I couldn't. I would at least feel sorry, I would pity. / Marriage depends not on disability but on the person's personal traits; but most probably no, I would be afraid of responsibility, this would also require much sacrifice / I couldn't. It would be too difficult for me. /...I would never do this out of pity because this wouldn't bring happiness to either side.*

Generalising the research data, comparative analysis of categories of interview contents Was conducted, based on clinical and social model of approaches to disability. Data of comparative analysis are given in Table 7.

Interview data analysis disclosed a dominating clinical model of attitudes to disability; the analysis of separate structural components of the approach coincides with elements of approaches disclosed by Siller, Ferguson, Vann, Holland even in 1967 (qtd. in Ruškus, 1999), which are characteristic to the clinical model of approaches: *generalised rejection, imputed functional limitations* and *emotional consequences, distressed identification*, describing disability (burden, inconvenience to the society, social problem) and one's emotions observing the disabled; *interaction strain* and *rejection of intimacy*, describing one's reactions to situations when the disabled needs support and discussing the possibilities of close relationships with the disabled.

On the other hand, reflections of the part of research participants also disclosed the content characteristic to the model of social approaches: disabled people are treated as tantamount members of the society with positive personal traits and particular abilities, they are worth being respected, spiritually enriching others who communicate with them; the disability is related to the needs of adjustment of the environment, support and tolerance of the society.

Table 7. Structure and Directiveness of Attitudes to the Disabled, based on Clinical and Social Model

Clinical model (the disease /diagnosis, deviation, personal problem)	Social model (social interaction, empowerment)	
Structure of attitudes to disability (Siller, Ferguson, Vann, Holland, 1967; qtd. in Ruškus, 1999, p. 62):	Categories and subcategories of Interview Content:	
	The conception of disability	
Generalised rejection – general negative orientation, justification for segregation of the disabled and social restriction.	*Disability as a punishment*	*Disability as a gift*
Imputed functional limitations – devaluation of the ability of the disabled to adapt in the environment	*Burden, inconvenience to the society*	**Understanding about Special Needs of Disabled**
		←Needs of social support *←Needs of tolerance from the environment*
	Physical restriction, limitation, inability *Restriction of communication*	*←Needs of technical assistance and adjustment of the environment* *←Needs of attention, psychological support*
	Personality Traits Attributed to Disabled People	
Inferred emotional consequences – negative inclinations perceived as a consequence of disability	*Negative inclinations of disabled* (alcoholism, homelessness)	Positive personality traits and abilities as such: *Sensitivity related to maintaining one's dignity, fellow-feeling, Spiritual strength of disabled, Disabled as a spiritually rich person; Enjoying the lifeofa disabled*
	Feelings with regard to Disabled	
Distressed identification – the disability arouses deep personal negative reactions.	*Fear; Guilt; Anger.* Reactions of rejection when imagining oneself as disabled	*Sympathy; Respect; Neutral reactions*
	Support provision	
Interaction strain – uncertainty, doubtfulness, ignorance how to behave communicating with the disabled	*Rejection to provide help* Support for the disabled depends on his/her disability. Rejection to provide help to the person with mental disabilities. Internal tension (fear, guilt, anger) – see category *Feelings with regard to Disabled*)	*Unconditional support for disabled* Support as a natural part of interaction. Positive or neutral reactions while communicating,
	Attitudes to Possibility of Close Relationships with the Disabled	
Rejection of intimacy – rejection of personal, family relationships with the disabled	*Possibility of close relationships depends on disability The doubt being on close links with the disabled Rejection of close relations with the disabled* (Negative approach, doubts about friendship; rejection or avoidance of close relationships with the disabled due to unequal match, avoiding pity, responsibility)	*An equivalent communication* Positive approach to friendship (friendship would enrich both sides).

It is obvious that in the modernising society, when the ideas of integration, equal opportunities, social participation have been factually legitimated and the status of the disabled is qualitatively improving, approaches towards disability are changing very insignificantly. As it has been mentioned, the majority of research participants did not have a possibility to directly communicate with disabled people. It is likely that young people's attitudes to disabled people are formed by stereotypes in the society, which are enhanced by the media and various other sources. Traditional devaluating approaches to disabled people are partly counterbalanced by knowledge students acquire during lectures, that is why part of young people are for tantamount interaction with the disabled. Similar data are also verified by other authors' researches. In Raudeliūnaitė's & Šavareikaitė's (2013), Žalkauskaitė's (2012) and other authors' opinion and according to the data of students interview, clinical approaches prevail: disability is perceived as a disease, pathology, loss, otherness, physically and socially restricting the person's possibilities, the source of all problems; the disabled person is unable to live self-dependently, is weak, needs help and care. On the other hand, according to Raudeliūnaitė & Šavareikaitė (2013) and according to the analysis of data of this interview, representations of disability reflecting the model of social approaches are identified, although not abundantly: in public communication the disabled are described as full-rate members of the society, there is information about achievements, activeness, social participation of the disabled; in students' representations the disabled distinguish themselves by spiritual strength, optimism, etc.

Generalisation

The research on structural components (knowledge, emotions, behaviour) of attitudes to disability disclosed their social and clinical directiveness. Anyway, the analysis of research data enables to state that students' reflections are dominated by clinical representations of disability.

Knowledge and understanding about disability. Analysing students' reflections it was identified that the majority of research participants associated disability first of all with the disease, disorders (particularly physical and movement disorders) and with the person's inability, helplessness, needs of help caused by the very disability. Besides, disability pertains to the person's negative reprehensible inclinations and subsequently arising social problems. All of it shows that research participants' attitudes to disability correspond to typical statements of the clinical model.

However, certain research participants derive these problems from indifference of the environment to the disabled person and this slightly reminds of statements of social model of attitudes towards the disabled about problems caused by insufficient social interaction. Problems of adjustment of the environment and insufficient social support are accentuated. According to many students, disabled people considerably lack attention as well as support from the environment and tolerance of the society (social model). On the other hand, certain students think that although maybe the disabled have too few opportunities to express themselves or lack occupation, at the same time they lack motivation for activity and occupation.

Emotions caused by disability. In their reflections on disability research participants disclose a rich scale of emotions, ranging from neutral reactions to anger reactions. The emotion that occurs most often, which they experienced observing disabled persons, is sympathy caused by the formed representation that the disabled person is helpless, disadvantaged in life and therefore, worth sympathy. Alongside with pity and sympathy the disabled is also respected for his/her efforts to be self-dependent and cope with difficulties caused by disability. Alongside with respect and sympathy part of research participants

observing disabled people feel fear about their own and their close relatives' health and part of them, the feeling of guilt that is difficult to explain.

In the opinion of the part of research participants, the disabled do not differ from other people, they have various needs and hobbies.

They believe that the disabled have many strengths: talents, abilities, which characterise them as persons who are able to construct quality of their social functioning. Strengths, which students attribute to the disabled, are not only their spiritual strength, the ability to adapt, change, find new capacities, abilities and even talents in themselves but also optimism, joy of life. Attribution of positive traits to the disabled can be treated in two ways: as experience of their communication with these persons and as a result of direct impact of the media when the disabled are shown as active, talented people who have achieved in their professional area or other self-expression area like sports, creative activities, etc. Students mentioned usage of the status of the disabled, manipulating surrounding people's pity, request of help as negative phenomena related to the disabled, causing anger.

It is characteristic to reflections of "other's" and one's own disability that both describing how the disabled person feels and describing their feelings imagining their disability, students mentioned that the person's adaptation is determined by complexity of disability, personality traits, attitude and also support from the environment, etc. Many repeated the idea that was expressed earlier that disability was a restriction, loss of independent life, hence, an inconvenience both for oneself and others; while part of students expressed rejection reactions to the proposal to imagine oneself with disability. Imagination of disability caused shock and negative emotions for the majority of research participants not only due to lost independence but also because surrounding people would express pity for them. Barely one or two expressed the opinion that if they became disabled they would find and disclose their positiveness, optimism or some particular abilities. Some think the opposite way that in such situation they maybe not able to adapt and would raise questions of meaning of life for themselves.

Thus, ambivalent attitudes to disability show up not only describing emotions arising when the disabled are observed but also having imagined oneself as disabled. Some excessively devalue, others form an excessively optimistic representation of disability. Like any other part of the society, disabled people do not necessarily distinguish themselves only by positive traits, particular abilities or achievements. This is also reflected in research participants' reflections where the disabled person is perceived not only as the person who has abilities and powers but also as restricted and disappointed; some research participants associate the representation of disability with homelessness, begging, alcoholism.

Behaviour with regard to disabled people is the most distinct component of approaches to disability. Research participants' behaviour with regard to the disabled highlighted contradictory approaches. The majority of research participants would unconditionally provide help straightaway having noticed that the disabled finds it difficult to overcome certain difficulties. However, their behaviour would depend on the type of person who needs help. They are mostly inclined to help people with movement disability but almost all doubted if they would help the person with mental disabilities; while one student stated that she was not obliged to help the disabled.

Approaches to disability particularly distinctly disclose themselves analysing research participants' considerations about possibilities of friendship and marriage with the disabled person. The possibility of close personal relationships with the disabled is acceptable only for a small part of research participants. In their opinion, friendship with the disabled person would be mutually beneficial; friendship with the disabled person could be grounded on altruistic incentive. However, the majority doubt about possibilities of close relationship (friendship,

marriage) and deny such relationships (it would depend on the person's disability and other circumstances; friendship with the disabled person would make feel uncomfortable; marriage is a too big responsibility, it cannot be based on pity, etc.).

Interview data analysis disclosed the dominating clinical model of attitudes to disability: 1) *generalised rejection, imputed functional limitations* and *emotional consequences,* and *distressed identification*, describing disability (disability is perceived as a disease, loss, otherness, physically and socially limiting the person's possibilities, the source of all problems; the disabled person is unable to live independently, is weak, needs support, care; is a burden, inconvenience for the society, a social problem) and one's emotions observing the disabled; 2) *interaction strain* and *rejection of intimacy,* describing one's reaction to situations when the disabled needs help and discussing the possibilities of close relationships with the disabled.

Students' reflections also identify attitudes to disability corresponding to the social model: disabled people are treated as tantamount members of the society, who have positive personality traits, particular abilities, are worth respect, spiritually enriching the ones who communicate with them; the needs of adjustment of the environment for the disabled, support and tolerance of the society are accentuated. Only a small share of students who took part in the survey envisage positive changes in the social situation of the disabled, the majority value them as insufficient, little, inconsiderable.

The majority of research participants did not have a possibility to directly communicate with disabled persons; therefore, it is likely that young people's attitudes to disabled people are formed by stereotypes in the society, which are enhanced by the media and various other sources. Traditional attitudes to the disabled devaluating them are slightly counterbalanced by knowledge acquired by students during lectures; therefore, part of young people are for tantamount interaction with disabled people and negatively value disabled people's social situation in the country.

Students' attitudes to disabled people are formed under the influence of both historically formed clinical representations of disability and stereotypes of socialisation of gender roles. The content of reflections on the impact of disability on the woman's and man's life quality reflects typical stereotypes of gender roles, the man's and woman's behaviour models. The disabled man is treated as slightly more vulnerable than the woman namely due to traits that are stereotypically attributed to the man. The content of the interview shows that disabled homeless people and beggars are men who have lost everything due to their vices (e.g., alcoholism). In research participants' opinion, in the disability situation women differently from men are stronger, more resistant, find it easier to accept disability and the position of the ward than men, and cope with problems related to disability; the woman's dignity is not hurt when she needs help and care because they themselves are caring, that is why it is natural that they expect care from the environment. Although gender stereotypes are evident, anyway, research participants' reflections also shows changing attitudes with regard to the woman's role and status in the society: the woman is treated as a strong personality who is able to independently manage her life.

Conclusions

1. Clinical approach to disability directions detected by analyzing the study participants' knowledge about people with disabilities. Although disability is still associated with the disease, inability, but it should be noted that nowadays young people are much more aware of the special needs of people with disabilities and disability are no longer considers only a personal problem. Special needs recognition and recognition of the limits of the environment is one of the characteristics of the social model.

2. Particularly controversial opinions about the feelings associated with the disabled and the disability. On one hand admired their strength and spiritual richness, is expressed respect for them, on the other hand these people are assigned the negative tendencies and characteristics. In addition, the negative tendencies associated with the causes of disability (typical clinical approach to disability).

3. One of the most striking indicators of the provisions is the behavioral component of attitude. Although the study participants understand the needs of people with disabilities (social support, assistance, tolerance, friendship, communication), however, the research data shows that it is still dominated clinical approach to disability – rejection when it comes too close relationships with people with disabilities. So basically people with disabilities are not considered as equal members of society.

4. Thus, the ideas of integration, equal opportunities, social participation, improving social situation of the disabled are inconsiderably changing approaches to disability. Anyway, the analysis of research data enables to state that there are dominated by clinical representations of disability.

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STRUCTURE AND DIRECTIVENESS OF ATTITUDES TO DISABILITY IN STUDENTS' REFLECTIONS

Summary

Irena Kaffemaniene, Margarita Jureviciene
Siauliai University, Lithuania

Relevance of the problem. Researches of social reality of the disabled and scientific discussions as well, influencing qualitative changes in disabled people's life and attitudes towards the disabled, taking place in the society (laws on integration, equal opportunities, etc.). However, the question remains: does integration of the disabled, provision of equal rights and other changes of life alter the attitudes of the society to disabled people? If yes, than to which direction are societal attitudes changing? Problem questions are: What models of societal attitudes to disability do existing representations of disability of the studying youth reflect? What stereotypes are reflected in students' attitudes to disabled persons?

Research aim: to identify structure and directiveness of attitudes to disability on the basis of clinical and social models.

Research Results. The research on structural components (knowledge, emotions, behaviour) of attitudes to disability disclosed their social and / or clinical directiveness.

Knowledge and understanding about disability. Analysing students' reflections it was identified that the majority of research participants associated disability first of all with the disease, disorders (particularly physical and movement disorders) and with the person's inability, helplessness, needs of help caused by the very disability. Besides, disability pertains to the person's negative reprehensible inclinations and subsequently arising social problems. All of it shows that research participants' attitudes to disability correspond to typical statements of the clinical model.

However, certain research participants derive these problems from indifference of the environment to the disabled person and this slightly reminds of statements of social model of attitudes towards the disabled about problems caused by insufficient social interaction. Problems of adjustment of the environment and insufficient social support are accentuated. According to many students, disabled people considerably lack attention as well as support from the environment and tolerance of the society (social model). On the other hand, certain students think that although maybe the disabled have too few opportunities to express themselves or lack occupation, at the same time they lack motivation for activity and occupation.

Emotions caused by disability. The emotion that occurs most often, is sympathy caused by the formed representation that the disabled person is helpless, disadvantaged in life and therefore, worth sympathy. Alongside with pity and sympathy the disabled is also respected for his/her efforts to be self-dependent and cope with difficulties caused by disability. Part of research participants observing disabled people feel fear about their own and their close relatives' health and part of them, the feeling of guilt that is difficult to explain.

In the opinion of the part of research participants, the disabled do not differ from other people, they have various needs and hobbies. They believe that the disabled have many strengths: talents, abilities, which characterise them as persons who are able to construct quality of their social functioning. Students also mentioned usage of the status of the disabled, manipulating surrounding people's pity, request of help as negative phenomena related to the disabled, causing anger; some research participants associate the representation of disability with homelessness, begging, alcoholism.

Behaviour with regard to disabled people is the most distinct component of approaches to disability. Research participants' behaviour with regard to the disabled highlighted contradictory approaches. The majority of research participants would unconditionally provide help straightaway having noticed that the disabled finds it difficult to overcome certain difficulties. However, their behaviour would depend on the type of person who needs help. They are mostly inclined to help people with movement disability but almost all doubted if they would help the person with mental disabilities.

The possibility of close personal relationships with the disabled is acceptable only for a small part of research participants. In their opinion, friendship with the disabled person would be mutually beneficial. However, the majority doubt about possibilities of close relationship and deny such relationships.

Conclusions

1. Clinical approach to disability directions detected by analyzing the study participants' knowledge about people with disabilities. Although disability is still associated with the disease, inability, but it should be noted that nowadays young people are much more aware of the special needs of people with disabilities and disability are no longer considers only a personal problem. Special needs recognition and recognition of the limits of the environment is one of the characteristics of the social model.

2. Particularly controversial opinions about the feelings associated with the disabled and the disability. On one hand admired their strength and spiritual richness, is expressed respect for them, on the other hand these people are assigned the negative tendencies and characteristics. In addition, the negative tendencies associated with the causes of disability(typical clinical approach to disability).

3. One of the most striking indicators of the provisions is the behavioral component of attitude. Although the study participants understand the needs of people with disabilities (social support, assistance, tolerance, friendship, communication), however, the research data shows that it is still dominated clinical approach to disability – rejection when it comes too close relationships with people with disabilities. So basically people with disabilities are not considered as equal members of society.

4. Thus, the ideas of integration, equal opportunities, social participation, improving social situation of the disabled are inconsiderably changing approaches to disability. Anyway, the analysis of research data enables to state that there are dominated by clinical representations of disability.

ANALYSIS OF IMPAIRED NONVERBAL COMMUNICATION IN PEOPLE WITH AUTISM SPECTRUM DISORDERS

Kateřina Vitásková, Alena Říhová
Palacky University in Olomouc, Czech Republic

Abstract

The impairment of nonverbal communication in people with autism spectrum disorders (ASD) is a differential-diagnostic criterion that predicts their development and, at the same time, it serves as a striking determinant of their socialization. In this paper, we focus on the analysis of nonverbal forms of communication in a group of individuals diagnosed with ASD. The presented conclusions are partial results of the specific research grant (IGA PdF_2012_021, researcher: Kateřina Vitásková).

Keywords: autism spectrum disorders, impaired communication ability, nonverbal communication, speech therapist, logopaedic intervention.

Introduction to the issue

Impaired communication ability (ICA) is a specific dominant symptom of autism spectrum disorders (hereafter referred to as ASD) with marked insufficiency at all language levels, inhibited imitation, decreased production of gestures, hypomimia and lack of communication plan during somatic-conditional expression (Svoboda, Krejčířová, & Vágnerová, 2001). Already at early childhood (during the first year of life), parents of children with ASD certainly detect symptoms that – from the diagnostic point of view – could be designated as specific for ASD diagnosis (Říhová & Vitásková, 2012). These symptoms include impaired speech development or directly its delay, problems with the initiation and retention of eye contact, and difficulties in facial expression (*Logopaedic intervention in people with autism spectrum disorders*. Department of Special Education Studies. Faculty of Education, Palacký University in Olomouc, 2011/2012, IGA PdF_2011_010, Říhová, Vitásková). A differentiating comparison of the communication ability in children with ASD and intact children was made by Phillips et al. (1995) in two-year old children. The resulting research data indicates significant aberrations in skills implying the ability of nonverbally expressed requesting, and incentives for object- centred attention of people with ASD. At the same time, they also report problems coexisting with sharing attention and dedication of sufficient concentration to the communication content.

Interesting investigations have been rendered focused on the quantification of specific nonverbal communication in people with ASD and their subsequent qualitative analysis, biological conditionality and diverse characters with regard to a group of intact respondents. Jones, Carr, & Klin (2008) conducted a comparative study using a video-presentation; they

mapped and analysed the frequency of eye-mouth visual fixation in 66 respondents aged two years (suspected ASD = 15, delay development = 15, intact = 36). The results clearly indicate that the group of children with suspected ASD showed a statistically significant difference in the given activity with respect to both control groups. In children with ASD, fixation on the eye as well the mouth areas was substantially lower; conversely, a higher percentage of fixation represented focus on objects. This result correlates with the subsequent investigation and the issue that has engaged the interest of professionals – prosopagnosia, i.e. impaired recognition of familiar faces. Through FMR examinations of individuals with ASD without mental disabilities, Schultz et al. (2003) found that their right g. fusiformis and right lower temporal lobe react pretty homogeneously while watching faces, identical to the cortical areas of intact individuals when viewing objects. Repeated research has shown again that discrimination of faces in individuals with ASD is activated by the lower temporal lobe more than in the control group, specifically the left lobe. Dalton (2005) used magnetic resonance to evaluate eye movements and concluded that persons with ASD showed excessive amygdala excitation which, according to him, was in direct relation to unpleasant feelings (up to feelings which give rise to threat). Establishing and functional use of eye contact – which is quite natural and often a source of pleasant emotions in the intact population – has, therefore, a completely antagonistic character in persons with ASD. Consequently, a new and unexplored area of research is the study of genetic mechanisms affecting amygdala hyperfunction that serves as the basis for the development of therapeutic strategies aimed at abnormal amygdala function in autistic people (Meyer-Lindenberg et al., 2009).

The presented research results demonstrably show that deficits manifested in the nonverbal communication component are the clear and dominant symptom of ASD clinical picture. In the national context (see, e.g., Hrdlička & Komárek, 2004; Thorová, 2006), information about the issue of nonverbal communication in persons with ASD is absent or contained only in the minimum, marginal part of the text. Alternatively, nonverbal communication strategies are included rather under social manifestations (Beranová & Hrdlicka, 2012). One reason may be the fact that parents and professionals focus primarily on the development of communication in terms of the development of its verbal component, which they consider more important. However, the ability to produce and receive nonverbal information is an essential part of social learning as well as the determinant of the overall development of the child. Despite the fact that nonverbal communication implements homogeneous function as verbal communication, i.e. the interpersonal transmission of information, we register research surveys (Leathers, 1997; Burgoon & Hoobler as cited in deVito, 2008) drawing attention to specific functions for which the nonverbal communication becomes particularly important. It is the ability to create and manage impressions differentiated into subcategories such as credibility, likeability, attractiveness, dominance and skills to define relationships and drive conversation and social interaction through this form of communication. Knapp and Hall (2006) complement influencing, deceiving and nonverbal expression with emotions that can be represented by postures and gestures, eye kinesics as well as pupil width.

The importance of nonverbal communication and the current lack of attention to this form of communication in people with ASD encouraged the implementation of the research (see IGA PdF_2012_021, researcher: Vitásková) whereof the particular research data shows that 56.52% of speech therapists in the Czech Republic (n = 69 clinical and school speech therapist) do not prefer the development of nonverbal communication in individuals with ASD within the realized speech therapy. At the same time, the given respondents (86.67%) report that they do not have diagnostic and interventional materials, preferring rather intuition or experience.

The primary goal of the research – which we will discuss in the next part of this paper – is to detect and analyse the specifics of nonverbal communication in a selected group of children with ASD based on systematic observation.

Research aim and objectives

In the time period March 2013 – June 2013, a study within a grant specific research was conducted at the Department of Special Education Studies, Faculty of Education, Palacky University in Olomouc (*Communication deficits in selected forms of impaired communication ability with the view to assess partial determinants of verbal and nonverbal components of communication in special education practice*, PdF UP, PdF_2012_021, 2013/2014, researcher: doc. Mgr. Kateřina Vitásková, Ph.D.). The aim of the presented research implemented within the framework of the specific research grant at the Faculty of Education in Olomouc was to detect and compare the specifics of nonverbal communication in a group of children with ASD through longitudinal observation, particularly through direct observation carried out during individual logopaedic interventions with the view to detect, analyse and compare nonverbal communication in a selected group of preschool children diagnosed with ASD.

In this paper, we will focus on these research objectives:

• detection of nonverbal expressions (eye contact, facial expressions, gestures, postures, proxemics and imitation) in children with ASD (using the application of Diagnostic scale from Říhová & Vitásková, 2012) realized during the direct observation (in 4 month period), and the quantification of the results using a specific numeric scale, and

• subsequent analysis of the deficits represented by the arithmetic mean of the values using the numeric scale evaluating the partial forms of nonverbal communication and their mutual comparison.

Methodology

The research group consisted of children with autism spectrum disorders at preschool age (3-6 years) attending a kindergarten for children with special education needs. The total number of children was 12, 7 boys and 5 girls (see Figure 1). From the diagnostic point of view, they were children with childhood autism (n = 8, 3 girls, 5 boys), atypical autism (n = 3, 2 girls, 1 boy) and combined cerebral palsy and atypical autism (n = 1, 1 boy).
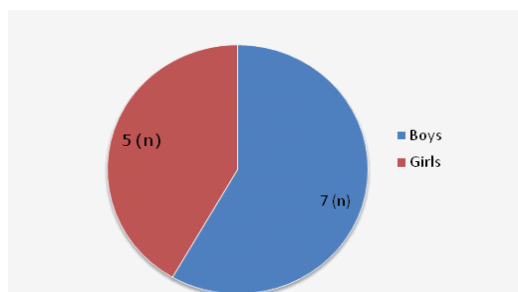
Figure 1. Distribution of the research group of children with ASD by gender

Figure 1 clearly shows that the research sample consisted of boys in a slight absolute predominance (58%). Regarding the diagnosis within the ASD nosological unit, the dominating childhood autism (67%) is followed by atypical autism (25%) and dual diagnosis of cerebral palsy combined with atypical autism (8%) (see Figure 2).

The main research method was longitudinal observation carried out within the period March 2013 – June 2013. In order to assess nonverbal communication in persons with ASD, we applied *Diagnostics of impaired communication ability*, its part *Diagnostics of nonverbal communication* created by Říhová and Vitásková (2012). The obtained results were regularly recorded (video and record sheet), analysed and then compared. These results subsequently represent the starting point for determining the content of speech therapy for each child

Figure 2. Diagnostic categories of children with ASD

Research results and discussion

The first area discussed is the evidence of deficits associated with difficulties in making eye contact, facial expressions, gestures and pointing to (asking for) objects (see Table 1).

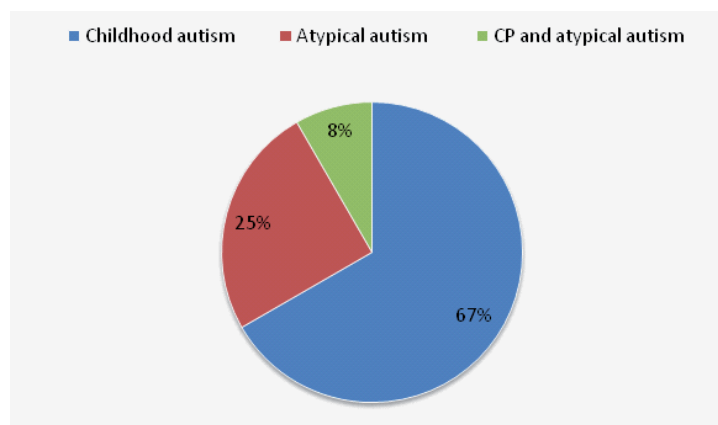**Table 1.** Analysis of results: eye contact, facial mimic perception and facial expression, perception and expression of gestures, pointing to and asking for objects

Child with ASD	Eye contact	Facial mimic perception	Facial expression	Perception of gestures	Expression of gestures	Pointing to objects	Asking for objects
D1	0	0	1	X	0	1	0
D2	1	X	0	0	1	0	0
D3	0	X	0	X	0	0	1
D4	0	0	1	0	0	1	0
D5	1	1	0	1	1	0	0
D6	0	0	1	0	0	0	0
D7	1	0	0	0	0	0	0
D8	0	0	0	1	1	2	1
D9	2	1	1	1	0	1	2
D10	1	1	0	1	2	1	2
D11	1	1	2	1	1	2	1
D12	2	1	2	1	0	2	2

D1–D8: children with childhood autism
D9–D11: children with atypical autism
D12: child with CP and atypical autism
X: the item cannot be evaluated
0: absence of ability in the given nonverbal communication
1: limited ability or presence of specifics in the given nonverbal communication
2: adequate ability in the given nonverbal communication

If we look at the absence of monitored areas (i.e. eye contact, facial expressions, gestures, pointing to objects and asking for objects), we record it in the frequency of 38. This represents a 45.24% inclination to value 0 which is present in all studied areas of nonverbal

communication; in the utmost rate, it is registered in the case of gesticulation expression (n = 7) and its average frequency is observed in various forms of nonverbal communication 5 times.

Limited ability in nonverbal communication such as insufficient frequency of establishing eye contact, facial mimic perception or perception of gestures with help, expression of gestures or facial expression only in the case of transparent expressions or facilitation during pointing to and asking for objects, we recorded in 32 cases of assessment (38.10%; value 1). The value 1 is also present in all studied forms of nonverbal communication with relatively uniform frequency distribution. The greatest frequency was observed in the reception of gestures (n = 6); in the smallest degree, it was registered in the ability to ask for objects through nonverbal communication (n = 3).

The highest value related to the intact ability in selected areas of nonverbal communication was recorded 11 times (13.10%) while it was absent in the case of perception of gestures and facial mimic perception. For these reasons, the given forms of nonverbal communication in people with ASD must be seen as very problematic. This value was most often recorded in the case of 3 records relevant to pointing to and asking for objects. During observations, we also used "X" value which indicates an obstacle to the possibility of evaluating the monitored area. This value was detected in two areas of nonverbal communication – facial mimic perception and expression of gestures (n = 2).

If we look at the distribution of evaluation categories in terms of ASD diagnoses, it is clear that value 2 (absence of impairment in the given form of nonverbal communication) is present in individuals with ASD diagnosed with atypical autism and atypical autism combined with cerebral palsy. The given value is recorded only in one case (pointing to objects, D8, see Table 2). Category "X" relating to interference in the assessment (for example due to a lack of effective cooperation) is registered in 3 children diagnosed with childhood autism.

Table 2. Arithmetic mean, median and mode

	Eye contact	Facial mimic perception	Facial expression	Perception of gestures	Expression of gestures	Pointing to objects	Asking for objects
arit. m. μ	0.75	0.42	0.67	0.5	0.5	0.83	0.75
Me $\tilde{x}$	1	0	0.5	0.5	0	1	0.5
Mod $\hat{x}$	0; 1	0; 1	0	1	0	1	0

Regarding the monitored nonverbal expressions, we applied the methods of arithmetic mean, median and mode for statistical reasons. The arithmetic mean in the monitored nonverbal areas (eye contact, facial mimic perception and facial expression, perception and expression of gestures, pointing to and asking for objects) has a specific value in the range of 0.5, i.e. between the scales 0 and 1. Inclination to scale 1 is obvious in the case of pointing to and asking for objects, and eye contact. On the other hand, the proximity to scale 0 is evident in the facial mimic perception. Even in the case of median, the value of 0.5 dominates; regarding the mode, it is obvious that also scales 0 and 1 alternate in uniform representation.

The above-presented Figure 3 provides a comparative view of eye contact, facial mimic perception and facial expression. The highest value (scale 2) was observed in eye contact and facial expression in clients diagnosed with atypical autism and atypical autism combined

with cerebral palsy. Figure 3 shows that value 1 is recorded 14 times, and value 1 relating to the lack of ability associated with the given skill is recorded 16 times in relation to all forms of nonverbal communication and primarily in the diagnoses of childhood autism with the exception of two descriptions in atypical autism.
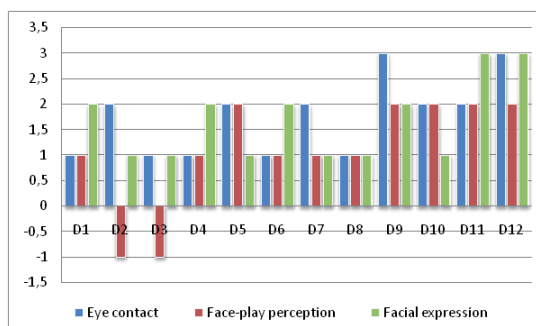
Figure 3. Comparison analysis of eye contact, facial mimic perception and facial expression

Note:
For better visual record in the chart, individual scales correspond to:
scale X: -1
scale 0: 1
scale 1: 2
scale 2: 3
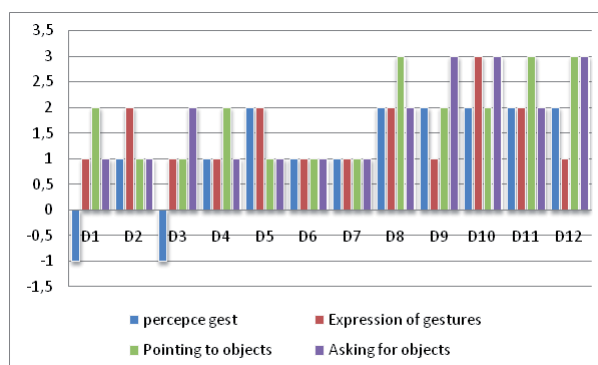
Figure 4. Comparison analysis of gestures, pointing to objects and asking for objects

Note:
For better visual record in the chart, individual scales correspond to:
scale X: -1
scale 0: 1
scale 1: 2
scale 2: 3

When comparing gestures, pointing to and asking for objects, we obtained value 2 which is presented in 7 records relevant to pointing to objects (n = 3), asking for objects (n = 3) and expression of gestures (n = 1). Antagonistic value 0 is recorded 22 times, which can be considered as a significant quantitative indicator.

The other research area of nonverbal communication in persons with ASD was the analysis of spheres that include the use of another person's body, active interest in people and things, the ability to imitate, respond to own name, posture and proxemics. Table 3 below presents the given areas in monitored preschool children with ASD.

Table 3. Analysis of results: the use of another person's body, active interest in people, active interest in things, imitation, response to own name, posture and proxemics

Child with ASD	The use of another person's body	Active interest in people	Active interest in things	Imitation	Response to own name	Posture	Proxemics
D1	0	1	0	0	1	0	0
D2	0	2	0	1	0	0	0
D3	0	1	1	1	0	0	1
D4	0	2	2	0	0	1	0
D5	1	2	1	1	1	1	1
D6	1	2	0	0	1	0	1
D7	1	2	1	0	1	0	2
D8	0	1	2	1	2	0	1
D9	1	3	2	1	2	2	2
D10	1	3	2	2	1	1	1
D11	2	1	3	2	2	2	1
D12	2	3	2	1	2	1	2

D1–D8: children with childhood autism
D9–D11: children with atypical autism
D12: child with CP and atypical autism
X: the item cannot be evaluated
0: absence of ability in the given nonverbal communication
1: sporadic presence of the given form of communication
2: presence of specifics in the given form of communication
3: adequate ability in the given nonverbal communication

When looking at the analysis of other forms of nonverbal communication (i.e. the use of another person's body, active interest in people and things, imitation, response to own name, posture and proxemics), it is clear that all of the offered rating scales are present. Value 0 indicating the absence or severe deficiency in the given assessment area is recorded 23 times (27.38 %), which can be considered as a favourable quantitative indicator with regard to the first group (45.24%) of analysed nonverbal areas. The given value prevails especially in posture (n = 6), followed by the preference for using another person's hand as a tool to achieve some own goal (n = 5); conversely, it is fully absent in non-verbal expression of interest in people.

The other scale characterized by sporadic presence or limitation in the given form of nonverbal communication is registered 33 times (39.29 %). Specifically, this relates to imitation and proxemics (n = 6), the use of another person's body and response to own name (n = 5). Its presence is found in all monitored forms of nonverbal communication with the smallest representation recorded for active interest in things (n = 3).

Value 2 implementing the highest scale in the case of using another person's body, imitation, response to own name, posture and proxemics was recorded 23 times (27.39%), primarily in relation to active interest in people and things (n = 5). The lowest frequency was detected for using another person's body and in the case of physical posture (n = 2). When focusing on active interest in people and things, the highest rating scale is represented by value 3, which was described 4 times (4.76 %).

If we look at the diagnostic categories, values 0 (n = 24) and 1 (n = 23) prevail in children with childhood autism, and values 2 and 3 are conversely present mainly in those with atypical autism.

Table 4. Arithmetic mean, median and mode

	The use of another person's body	Active interest in people	Active interest in things	Imitation	Response to own name	Posture	Proxemics
arit. m. μ	0.75	1.92	1.33	0.63	1.08	0.67	1
Me $\tilde{x}$	1	2	1	1	1	0,5	1
Mod $\hat{x}$	0; 1	2	2	1	1	0	1

The arithmetic mean in the observed nonverbal areas (use of another person's body, active interest in people and things, imitation, response to own name, physical posture and proxemics) has a specific value ranging from 0.63 to 1.92 with variance of 1.29. The lowest frequency value is specific to imitation; on the contrary, the highest described indicator is that for active interest in people. The median is characterized by predominance of value 1, which also dominates the mode.

In the next section, we present a visual comparison of the selected forms of nonverbal communication mentioned in the above-presented Table 3.
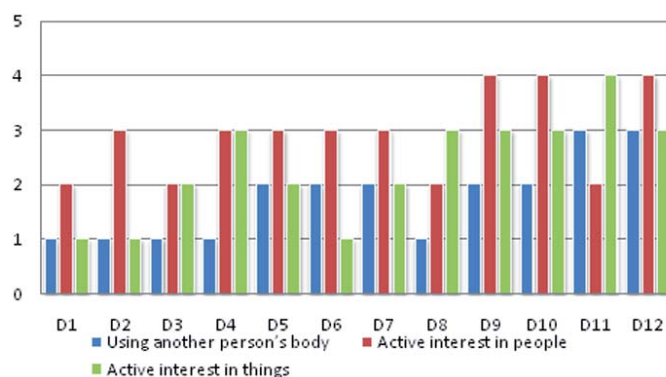
Figure 5. Comparison analysis of the use of another person's body, active interest in people and active interest in things

Note:
For better visual record in the chart, individual scales correspond to:
scale X: -1
scale 0: 1
scale 1: 2
scale 2: 3
scale 3: 4

From the above chart 5, we can deduce that the dominant status over other categories regarding homogeneous frequency representation is occupied by scale 1 and scale 2 (n = 12; 33.33%). The highest scores (scale 2 and 3) implementing smooth nonverbal communication identified with the ability homogeneous with the intact population are detected 18 times (44.44%). When focusing on antagonistic value (scale 0) and with regard to the above-presented chart 5, we can state that the given value was detected 8 times (22.22%) within the research survey in the selected group of respondents.

The comparison of nonverbal communication in the area of imitation, response to own name, posture and proxemics clearly shows that the representation of value 0 is typically 33.33%, the following scale 1 is present in 43.75%, and that the highest value (scale 3) was observed in 11 respondents (22.92%).
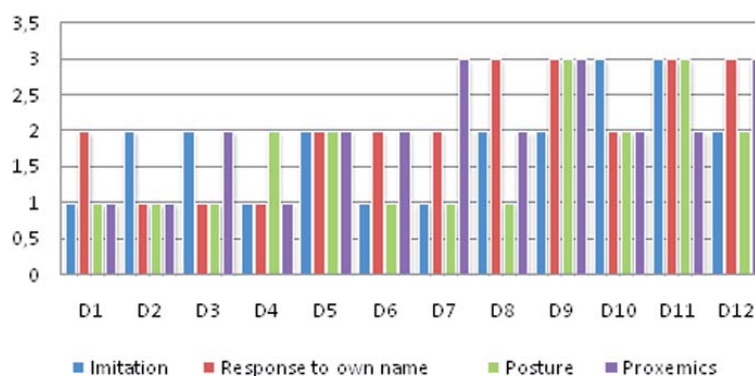
Figure 6. Comparison of imitation, response to own name, posture and proxemics

Note:

For better visual record in the chart, individual scales correspond to:

scale X: -1

scale 0: 1

scale 1: 2

scale 2: 3

scale 3: 4

Conclusions

Autism spectrum disorders – representing a heterogeneous group of specific and non-specific symptoms – have a common deficit area pervading all diagnostic units, i.e. impaired communication ability that is significantly manifested also in aberrations affecting nonverbal communication.

Nonverbal communication implies a wide range of communication (eye contact, facial expressions, gestures, posture and others) and any impairment of its receptive or expressive component always represents significant interference in the communication plan.

As evidenced by the above results of individual researches as well as analysis of nonverbal communication in the monitored group of children with ASD, deficits associated with this form of communication are clear and, at the same time, individually manifesting in each child. As we further found, the deficient area also represents a targeted focus on its development in the context of speech therapy.

For these reasons, the issue of nonverbal communication in persons with ASD constitutes an important research sector that deserves more attention not only at the level of logopaedic care but also in terms of psychological, medical and special education engagement.

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ANALYSIS OF IMPAIRED NONVERBAL COMMUNICATION IN PEOPLE WITH AUTISM SPECTRUM DISORDERS

Summary

Kateřina Vitásková, Alena Říhová
Palacky University in Olomouc

The particular above-presented results suggest that impairments of nonverbal communication in individuals with ASD represent an obvious symptom, whereas the differences in the degree of disruption of individual forms of nonverbal communication are specific. They reflect individual abilities and dispositions of the child and especially a specific type of ASD diagnosis. When looking at the lowest scale of the performed analysis, value 0, which we used to identify a significant problem in the given communication or even absence of the given ability, we can say that it is registered with a significant presence (n = 7) in relation to the expression of gestures. This value was also detected in the case of posture (n = 6) and nonverbal expression of disagreement (n = 5). The following scale used in the evaluation of communication skills in children with ASD, designated as value 1, implements specifics and deficits in impaired nonverbal communication or includes a potential help with expressing or understanding individual forms of nonverbal communication. The given value was recorded primarily in relation to the reception of gestures (n = 6), imitation (n = 6), proxemics (n = 6) and expressing emotions (n = 5). We also noticed a scale associated with nonverbal communication which, according to our observation, does not show any striking differences with respect to intact people. Even though the given value did not occupy a dominant status in reference to the aforementioned scales, we consider important to note its presence. The highest representation includes nonverbal expression of consent (n = 5), pointing to or asking for objects (n = 3) or active interest in other people expressed nonverbally (n = 2). On the contrary, complete absence of the rating scale is found in the perception of gestures

and facial mimic perception. For these reasons, it can be expected that this sphere of nonverbal communication (perception of gestures and facial mimic perception) represents a very problematic area in people with ASD.

Therefore, disruptions of nonverbal communication in people with ASD show clear and specific symptoms. At the same time, however, it is also necessary to point out the justness to refute false beliefs associated with the lack of interest in social interaction, complete inability of individuals with ASD to express their wishes or requests, and also negate false claims associated with the absence of imitation. The research data conversely indicates interest in establishing contacts with other people through nonverbal communication (value 2, n = 5) and the ability to imitate, although limited or problematic (dominance of value 1), which was recorded in 39.29% along with adequate nonverbal response to salutation. On the other hand, we must not forget the significant deficits manifested primarily in facial expressions and gestures (dominance of value 0 regarding the perception of gestures and facial mimic).

The presented results could be an incentive to reflect on the justification of deeper diagnosis of impaired nonverbal communication in people with ASD, which may become an important diagnostic tool as well as an essential intra-phenomenon differential-diagnostic marker.

Analysis of impaired nonverbal communication in people with autism spectrum disorders
Kateřina Vitásková, Alena Říhová

MOTIVATION OF BEHAVIOR
OF ELEMENTARY SCHOOL CHILDREN
WITH AUDITORY SENSORY DEPRIVATION

Svitlana Yakovleva
Kherson State University, Ukraine

Abstract

This paper presents an experimental study of motivation of behavior of elementary school children with auditory sensory deprivation. Hard-of-hearing children with 2-4 degree of deafness were examined in accordance with the strength of their nervous processes. We used the table of behavior features proposed by Гильбух (2009) and a questionnaire to evaluate motivation to attend school. The paper presents correlations between indicators of behavioral responses and motivational sphere for this children's group according to their strength of nerve processes before schooling start, during school studying and at additional correction implementation. Influence of schooling and additional correction on formation of new correlative relationships was shown, this fact highlighting impact of schooling and additional correction on neural process activation that significantly improves the learning activity states.

Key words: *motivation of behavior, children with auditory sensory deprivation, correlations.*

Relevance of studies. Learning activities during early school years are closely related to arbitrary behavior, formation of which begins in preschool years. Such behavior allows a child to control own behavior, to have an adequate diligence level, continuous undivided attention during tasks, to bring task to logical conclusion, control over own actions.

Such behavior is performed by a child if he/she has school motivation, has a desire to acquire some knowledge, feel like a schoolchild, and attend school.

Children with hearing impairments bring cognitive motivation to the forefront in the motivation sphere, but children with intellectual development problems prefer play activities, play motivation dominates for them. Motivational behavior begins to develop in early childhood and continues during school years. Motivational readiness for school is formed due to broadening ideas about the world, about relationships between people, desire to receive an encouragement from a teacher. Social motives predominate for children with impaired hearing in the case of broadening of child's perception on life around him/her, during increased communication with peers and possibility of understanding. During the school period, such communications pass to the next level and supported by cognitive motives that are common to child's classmates and peers, because the speech communication singularity of this category of children significantly complicates communication, but common activities during namely this school period lead to faster understanding.

Collaboration, partnerships, overall activity pace during group task performance promote motivation to group communication, joint activities and cognitive motives.

Motivational readiness is aimed at determination of child's readiness for schooling, acceptance of new knowledge, development of eye-mindedness. Motivation, according to Maslow (Маслоу, 2008), is interpreted as a field that includes needs, motives, goals, interests, and their interactions.

Many teachers emphasize importance not only of readiness to acquire knowledge and skills, but the level of child's readiness for learning, which includes abilities to analyze, compare, and highlight features and properties of objects and phenomena, developed eye-mindedness and abilities to draw conclusions. To do this, children need to have developed verbal abilities. A prerequisite for any activity is the ability to communicate with peers, which is somewhat difficult due to existing auditory defects. Thus, behavior of children with hearing impairment is stipulated by child's self-esteem of the defects on the one hand, and the desire and actions aimed at reducing of physical and psychological distance between them and children with normal hearing (Речицкая, 2003).

One of the first researchers of this issue Платонов (1972) believed that behavioral responses are determined not only by emotional states, but also play an important role in adaptation.

Given the above, we can affirm that the behavior, motivation and emotional sphere development is one of the basic conditions of learning activities for children with auditory sensory deprivation.

An experimental study of children with auditory sensory deprivation was performed for **the purpose** to study their behavior and motivational sphere. Behavior of children with auditory sensory deprivation was the study **object**. Motivational of behavior of hard-of-hearing children of primary school age served as the study **subject**. We put forward the next **tasks** to achieve the study purpose:

1. to determine motivation and behavior development of elementary school children with auditory sensory deprivation;

2. to define correlation between behavior and motivational sphere, formed by this category children at the beginning of schooling, in the process of special corrective help and in the process of additional corrective intervention, which was carried out with influence on neuropsychological processes.

For the experiment, a respondents' group was selected consisting of 119 people, children of primary school age with auditory sensory deprivation who were hard-of-hearing with deafness of 2-4 degree according to the classification of Л.В. Нейман (Нейман & Богомильский, 2001), 59 girls and 50 boys aged from 7 to 10.3 years. Children are enrolled in the kindergarten - special boarding school № 29 in Kherson (Ukraine) for hearing impaired children and in the school for children with impaired hearing of Mykolaiv city, where classes of elementary education exist. Among respondents, children with deafness of 2 degree constituted 31.9%, ones with 3 degree deafness were 51.3%, and ones with 4 degree deafness were 16.8%. 75.6% of children had preserved intellect, but 24.4% showed somewhat reduced intellect, i.e. they belong to a group of children with developmental delay. Hearing loss of this children group was due to hereditary and acquired causes. Usually, it is bilateral cochlear neuritis in 32.1% of cases, sensor neural hearing loss of 2-3-4 levels at 53.5%, bilateral sensory hearing loss at 20.2%. Only 11.7% of the observed children inherited hearing loss; the children were from families of deaf people. Causes of deafness were not clear in 6.7% of cases, and the rest – 93.3% – acquired hearing loss due to influence of various kinds of drugs.

The lines of thinking and speech development for children with hearing impairment meet at a point later than that of children with good hearing. В.Розанов (1990), on the base

of this principle, identified the following groups of children, each of which requires a special approach. The first group consists of children with a relatively high level of eye-mindedness. They are not inferior to their peers with good hearing as for development of eye-mindedness, but they are behind in development of conceptual thinking for about three years. These children are highly motivated for learning, they are active and independent at task solving, successfully mastered the curriculum. The second group consists of children with an average level of eye-mindedness, so they are is behind in both types of thinking in comparison with normal hearing peers. During schooling they need constant care of a deaf educator. The third group includes children with a high level of eye-mindedness and a low level of conceptual thinking. In terms of eye-mindedness these children are not inferior to normal hearing peers, but they have difficulty in verbal conversation mastering. That is why they have difficulties in curriculum mastering. Their operations are inadequate, insufficient and inconsistent noticed Соловьев back in 1971.

For the experiment, children with auditory defects were divided into three subgroups according to the strength of their nervous processes (NP): with a strong NP type, a medium NP type and a weak NP type. The study of all components was performed according to nervous processes strength.

Research methodology

The experimental study was conducted using the method of Гильбух (2009), which included identification of certain traits of behavior and learning (see. Table 1). Observation after children, talk with their teacher gave an opportunity to assess child's psychological features with a rating scale (a five-mark scale of feature intensity). Mark 1 corresponded to a low level of feature indicators development, mark 5 corresponded to the maximum assessment, mark 3 was an intermediate score. These marks created overall assessment and characterized overall level of personality development and strength of nervous processes according to subjective observations. At this experimental stage, a questionnaire survey of primary school children was conducted to determine the level of academic motivation. The questionnaire survey was performed in a writing form, individually.

The schoolchildren were asked to answer the questions and, depending on the answer, the experimenter proposed a mark. If it was necessary, questions were explained additionally

According to the obtained index, the level of academic motivation development was estimated. The maximum score was 30 marks (the higher the score, the higher the level of motivation). For convenience, scores are converted to the levels: 25-30 marks means formed attitude to himself (herself) as to a schoolchild, high educational activity; 20-24 marks means that attitude to himself (herself) as to a schoolchild is almost formed, a sufficient level , 15-19 marks means positive attitude towards school, but school attracts mainly by extracurricular activities, an average level, 10-14 marks means that attitude to himself (herself) as to a schoolchild is not formed, a below average level. Lower than 10 marks means negative attitude to school, low academic motivation.

The respondents of experimental group were divided by the types of neural process strength in accordance with Table 2, where all types were represented almost equally.

A survey of the children according to the strength of nervous processes was conducted to identify the extent of development of the motivation to attend school among primary school children with auditory sensory deprivation.

28.57 % of the children with hearing defects responded positively for the first question, describing their desire to attend school. The question number 3 reflects also to some extent a desire to attend school. The motivation to attend school for the most children is associated with ability to communicate with peers. It is applied for 66.4 % of the children, but there are a small

number of children with hearing impairment – 6.72% (8 people) – who do not have friends among their peers and 29 children, which is 24.4%, who socialize with peers not enough. According to the table, social normative motivation to attend school is at the first place for the hard-of-hearing group. Communication motives took the second place, that is communication with friends, and cognitive activities took the third place, although encouragement from adults is not the least of all motives.

Table 1. Behavioral features proposed by Гильбух

Quality	1	2	3	4	5
Attention focusing	Low ability to focus attention. Noise, conversations distract easily from a task		A child works very enthusiastically but easily stop working (starts talking), and then continues to work	A child can focus attention. He/she is not distracted	
Resistance to failures	A child cries after comments, bad evaluation, he/she is passive in class		A child can lose interest and move on to other tasks	A child takes initiative at lessons. He/she prepares carefully for lessons.	
Attitude to difficulties	Minor difficulties are surprising. No attempt to overcome an obstacle, a child just stops working.		A child can be confused and move on to other tasks	A child shows persistence, tries to find the error himself (herself)	
Behavior	A child is half-hearted, withdraws eyes, is slow in response		At first, a child is hesitant, and then answers questions calmly	Conversation and answers are as usual	
Stress during task solving	During task fulfillment, a child has constrained posture, manipulates with objects. He/she is blushing; his/her hands are trembling.		A child shows sometimes stress signs	Behavior is as usual, without stress	
Working efficiency	A child performs poorly long-term work, prefers easy tasks.		A child fulfills easy as well as hard tasks	Work is efficient	
Sociability	A child prefers solitude; likes to be alone or with a best friend.		A child feels good alone and in company	A child prefers group plays	
Responsibility	A child refuses to work with individual responsibility.		A child fulfills sometimes orders	A child performs responsible work with a desire	
Proneness to conflicts	A child seeks always a compromise		A child seeks sometimes a compromise, but sometimes defends own views	A child defends always their views, despite possibility of conflicts	

Table 2. Types of neural processes in the experimental group

Groups, number	Types of neural process strength		
	strong	medium	weak
Hard-of-hearing children (n = 119), %	34.4% n = 41	35.3% n = 42	30.3% n = 36

The data on the level of the motivation to attend school in the group of hard-of-hearing primary school children is distributed as follows:

– the high level is shown by 23.53 % the entire sample, it is 28 schoolchildren;
– 34 children has the sufficient level, it is 28.57 %;
– the average level is shown by 41 schoolchildren (34.45 %);
– the motivation level is lover then average for 16 children (13.45 %).

The results indicate that the level of motivation formation for the children with sensory deprivation is average. The tabular data shows that 63.02% children from the group of hearing impaired ones have average motivation to attend school, 43 children with hearing defects have the sufficient level of academic motivation, but the motivation is developed due to emotional factors and communicative orientation, i.e. extracurricular activities, that indicates a need for development of children's interest in educational process and teacher's competence.

Along with questioning, we monitored children's behavior to determine the primary strength of nerve processes on the base of subjective data and traits of these groups children. These data are in some way related to the motivational components as for school attendance of primary school children.

Children's behavior was assessed with the Table of Гильбух (2009) to determine behavioral responses and with 5-mark intensity scale for behavior features, where:

– high academic activity equals to 25-30 marksж
– a sufficient level equals to 20-24 marksж
– 15-19 marks means average positive attitude to school, but it is related with extracurricular activitiesж
– 10-14 marks means a lower than average level, attitude to school was not formed4
– lower then 10 marks means negative attitude to schooling.

According to the average data from the Table of Гильбух (2009), we can say that the children from this group have focused enough attention and a high level of behavior (3.54 marks), sufficient general working efficiency (3.29 marks) and responsibility (3.2 marks). Children react normally at educational difficulties (3.57 marks), that indicates their readiness for schooling.

Total mark sum on the 5-mark scale was distributed as follows (Table 3).

Table 3. Total mark sum for behavior features of the examined group

Group	Types of NP strength	Mark sum for behavior features (marks)
Hard-of-hearing children n = 119	Strong type of NP strength n = 41	34.85 ± 0.91
	Medium type of NP strength n = 42	30.38 ± 1.38
	Weak type of NP strength n = 36	24.58 ± 1.44

As a result of academic performance, brain activity changes, it means processes of excitation and inhibition, motivational and behavioral responses.

We studied correlative relationships that emerged during schooling, after a correctional program and after additional correction for children where influence of neurophysiologic processes was carried out.

At the beginning of the experiment, i.e. learning start, children with auditory sensory deprivation and a strong type of nervous processes (Figure 1 A) had a high correlation between the total index (sum) of behavioral responses and indicators of attention ($r = 0.71$), significant positive correlations between indicators of attention and resistance to failure ($r = 0.51$), attitude to difficulties ($r = 0.51$), stress during task solving ($r = 0.51$), general working efficiency

(r = 0.51); between resistance to failure, attitude to difficulties (r = 0.51) and general working efficiency (r = 0.51); the sum of behavioral responses and specific behavior during task fulfillment (r = 0.51); general working efficiency (r = 0.51), sociability and responsibility (r = 0.51).
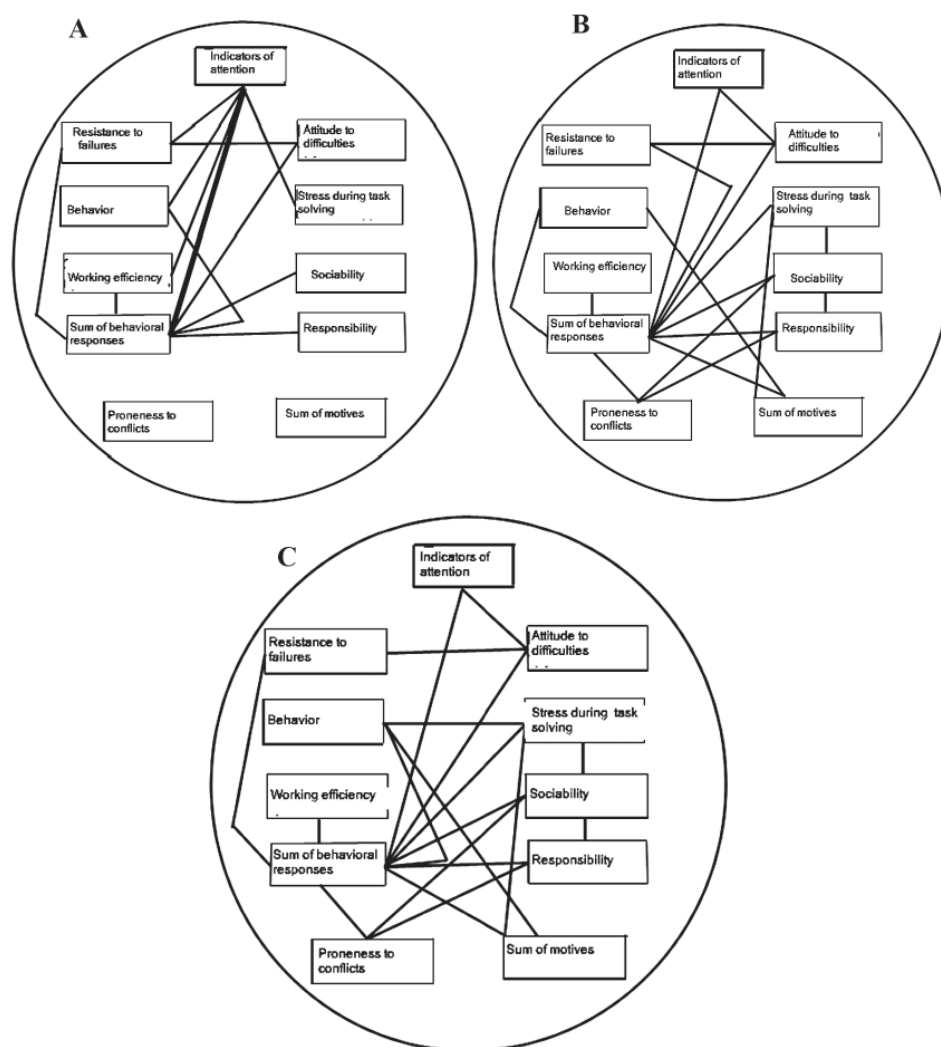

Figure 1. Correlations between the components of behavioral responses and the motivational component for primary school children with auditory sensory defects at the beginning of the experiment

Note: A – Hard-of-hearing children before influence, strong type of NP; B – Hard-of-hearing children before influence, medium type of NP; C – Hard-of-hearing children before influence, weak type of NP. The solid lines show significant positive correlations (r = 0.51-0.71), the solid bold lines show high correlations (r = 0.71-0.99) between indicators respectively. The dotted lines show significant negative correlations (r = 0.51-0.71), the dotted bold lines show high correlations (r = 0.71-0.99) between indicators respectively.

The schoolchildren with the medium NP type (Figure 1 B) revealed correlation between attitude to difficulties and indicators of attention (r = 0.65); the sum of behavioral responses and indicators of attention (r = 0.58), resistance to failures (r = 0.63), behavior (r = 0.51), stress during

task solving (r = 0.66), general working efficiency (r = 0.51); between sociability and response (r = 0.53), proneness to conflicts (r = 0.58), the sum of behavioral responses (r = 0.65).

The schoolchildren with the weak NP type (Figure 1 C) have, before schooling start, positive correlations between the sum of behavioral responses (r = 0.55) and attitude to difficulties (r = 0.66), resistance to failures (r = 0.61), stress during task solving (r = 0.66); between sociability (r = 0.65), responses at lessons (r = 0.56), proneness to conflicts and the sum of behavioral responses (r = 0.55). A significant positive correlation exists between the sum of motivational components and the summary estimation of behavioral responses (r = 0.57).

After training with the correction program, schoolchildren from the experimental group were surveyed repeatedly concerning links between behavioral components and motivation.

Figure 2. Correlations between the components of behavioral responses
and the motivational component for primary school children with auditory sensory defects
after corrective training

Note: A – Hard-of-hearing children, strong type of NP; B – Hard-of-hearing children, medium type of NP; C – Hard-of-hearing children, weak type of NP. The solid lines show significant positive correlations (r = 0.51-0.71), the solid bold lines show high correlations (r = 0.71-0.99) between indicators respectively. The dotted lines show significant negative correlations (r = 0.51-0.71), the dotted bold lines show high correlations (r = 0.71-0.99) between indicators respectively.

In the group of hard-of-hearing children with the strong NP after training (Figure 2A), new high positive correlations were formed between the sum of behavior components, the stress component (r = 0.71), answering for questions (r = 0.7), proneness to conflicts (r = 0.72) and attitude to difficulties (r = 0.79). Positive significant correlations were observed between resistance to failures and attitude to difficulties (r = 0.51), general working efficiency and indicators of attention (r = 0.51); between the sum of behavior components and attitude to difficulties (r = 0.54) , behavior (r = 0.51), general working efficiency (r = 0.6); between the sum of behavior responses and proneness to conflict (r = 0.51).

In the group of hearing impaired children with medium strength NP type (Figure 2 B) after corrective training, formation of significant positive correlations was observed between indicators of behavioral components , namely between the sum of behavioral responses and resistance to failure (r = 0.51), attitude to difficulties (r = 0.52), stress during task solving (r = 0.51), sociability (r = 0.51) and proneness to conflicts (r = 0.54). At the same time, formation of significant inverse correlations occurred between general working efficiency and indicators of attention (r = -0.69), that indicates significant strain of neural processes during thinking activities at this category children.

A large number of significant positive correlations was observed in the group of children with the weak NP type (Figure 2 C). A high correlation was found out between the sum of behavior components (r = 0.85), between attitude to difficulties and resistance to failures (r = 0.87). Significant positive correlations exist between the sum of behavior responses, proneness to conflicts (r = 0.51), answering for questions (r = 0.51), general working efficiency (r = 0.55), behavior (r = 0.56); between stress during task solving and behavior (r = 0.55), answering (r = 0.51) and the sum of behavioral responses (r = 0.7); between proneness to conflicts and the sum of behavior response components (r = 0.59).

As the results show, a number of correlations between the behavior components and motivation increases after corrective training, this is a positive result for learning activities.

After additional correction, which was aimed at physiological functions, a psychomotor system of children suffering because of hearing impairment as a primary defect, a study of the motivation and behavioral components was conducted again. (Figure 3).

In the group of hard-of-hearing children with the strong NP (Figure 3 A) after additional correction, significant positive correlation forming was observed between indicators of attention and behavior (r = 0.63), general working efficiency (r = 0.51) , sociability (r = 0.57) and the sum of behavior components (r = 0.66); between attitude to difficulties and resistance to failures (r = 0.52); sociability (r = 0.51), the sum of the behavioral response components (r = 0.58); between behavior, sociability (r = 0.71) and general working efficiency (r = 0.55); the sum of behavioral responses (r = 0.68) and a state of motivation formation (r = 0.51).

The schoolchildren with the medium NP type (Figure 3 B) showed many new significant positive correlative relationships, including high correlations found out between indicators of attention and resistance to failure (r = 0.84), behavior (r = 0.74), the sum of behavior components (r = 0.71). Positive significant correlations were found out between resistance to failures and attitude to difficulties (r = 0.52), behavior (r = 0.61), stress during task solving (r = 0.54); between behavior, general working efficiency (r = 0.59) and the sum of behavioral components (r = 0.79); between sociability (r = 0.6) and answering (r = 0.7).

Quite a number of new correlations was observed after additional correction in the group of hearing impaired children with the weak NP type. High correlations were observed between the sum of behavioral components and indicators of attention (r = 0.85), between attitude to difficulties and resistance to failures (r = 0.87). Significant correlations emerged between indicators of attention and behavior (r = 0.55), general working efficiency (r = 0.55), answering for questions (r = 0,51); between behavior and stress during task solving (r = 0.65), general working efficiency and answering for questions (r = 0.51); between answering and proneness to conflicts (r = 0.5) and the sum of behavioral components (r = 0.59).
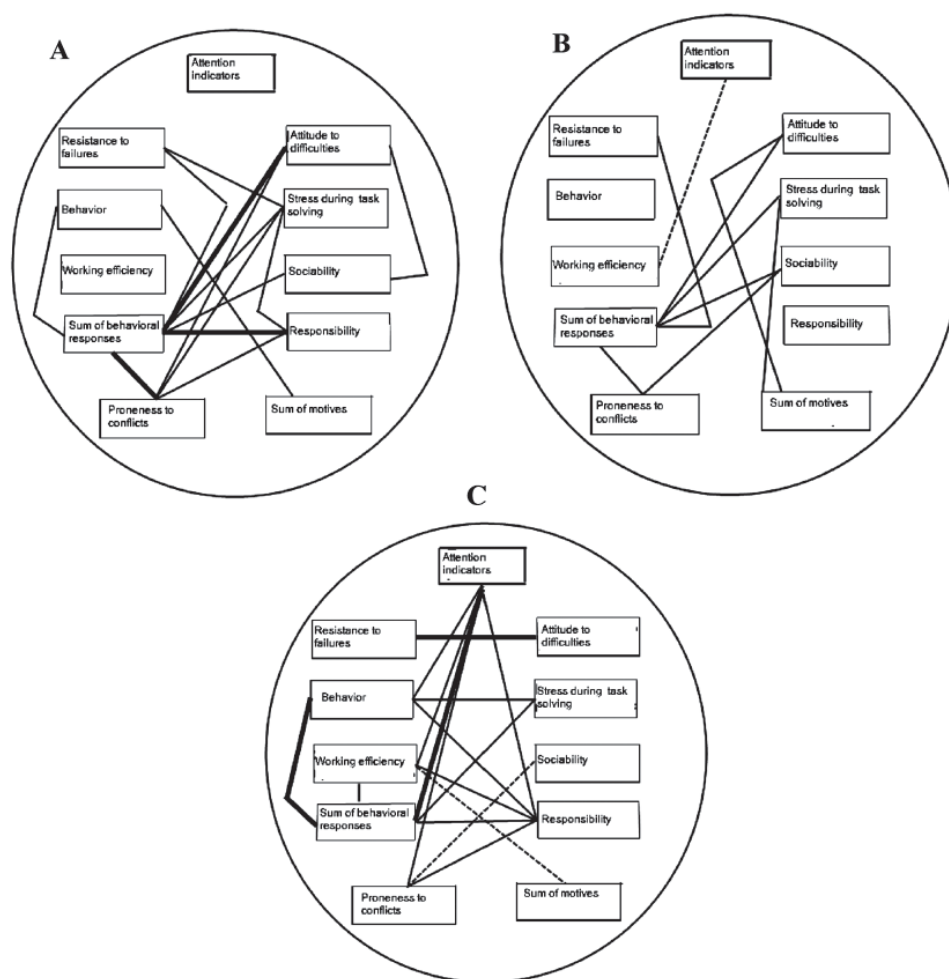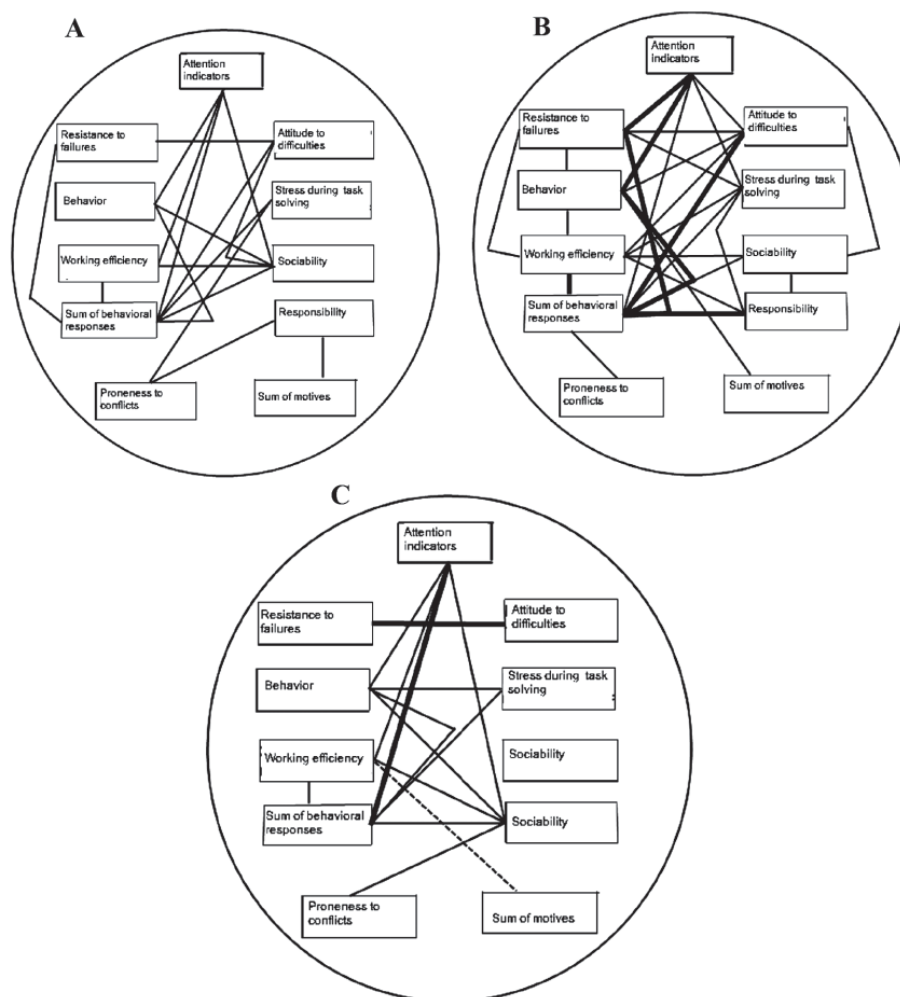
Figure 3. Correlations between the components of behavioral responses
and the motivational component for primary school children with auditory sensory defects
after additional correction

Note: A – Hard-of-hearing children, strong type of NP; B – Hard-of-hearing children, medium type of NP; C – Hard-of-hearing children, weak type of NP. The solid lines show significant positive correlations (r = 0.51-0.71), the solid bold lines show high correlations (r = 0.71-0.99) between indicators respectively. The dotted lines show significant negative correlations (r = 0.51-0.71), the dotted bold lines show high correlations (r = 0.71-0.99) between indicators respectively.

These findings suggest a positive impact of learning activities on the levels of behavior and motivational component development that is an essential lever in educational activities. Formation of correlations during corrective training and additional correction indicates additional activation of brain structures that impact on the behavior and motivational-emotional sphere, which play an important role in development of cognitive processes and higher mental functions of children with sensory disabilities.

Conclusions

1. The results indicate that the level of motivation formation at children with sensory defects is average. That is, 63.02% children from the group of hearing impaired ones have average motivation to attend school, 43 children with hearing defects have the sufficient level of academic motivation, but the motivation is developed due to emotional factors and communicative orientation, i.e. extracurricular activities, that indicates a need for development of children's interest in educational process and teacher's competence

2. We determined the behavioral components with the Table of Гильбух (2009) and noted that children from this group have focused enough attention and a high level of behavior (3.54 marks), sufficient total working efficiency (3.29 marks) and responsibility (3.2 marks). Children react normally at educational difficulties (3.57 marks), that indicates their readiness for schooling.

3. Correlations between the components of behavioral responses and formation of the motivation to attend school were determined during corrective training and additional correction, which showed that the learning activity contributes in formation of sufficiently high positive correlations between studied indicators, and additional correction, which influenced on children's neurophysiologic structures and psychomotor system, stimulated spreading of correlations and formation of new ones. A large number of correlations emerged at children with auditory defect and the weak type of nervous processes that indicates a need for additional correction for all groups of children, especially for children with the weak type. Additional correction activate brain structures, has positive effect on behavior, motivational and emotional sphere that is one of the basic conditions of learning activities for children with auditory sensory deprivation.

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MOTIVATION OF BEHAVIOR OF ELEMENTARY SCHOOL CHILDREN WITH AUDITORY SENSORY DEPRIVATION

Svitlana Yakovleva
Kherson State University, Ukraine

Summary

Learning activities during early school years are closely related to arbitrary behavior, formation of which begins in preschool years. Such behavior allows a child to control own behavior, to have an adequate diligence level, continuous undivided attention during tasks, to bring task to logical conclusion, control over own actions.

Children with hearing impairments bring cognitive motivation to the forefront in the motivation sphere, but children with intellectual development problems prefer play activities, play motivation dominates for them.

Motivational readiness is aimed at determination of child's readiness for schooling, acceptance of new knowledge, development of eye-mindedness.

Behavior of children with hearing impairment is stipulated by child's self-esteem of the defects on the one hand, and the desire and actions aimed at reducing of physical and psychological distance between them and children with normal hearing.

An experimental study of children with auditory sensory deprivation was performed for the purpose to study their behavior and motivational sphere.

We put forward the next tasks to achieve the study purpose:

1. to determine motivation and behavior development of elementary school children with auditory sensory deprivation.

2. to define correlation between behavior and motivational sphere, formed by this category children at the beginning of schooling, in the process of special corrective help and in the process of additional corrective intervention, which was carried out with influence on neuropsychological processes.

For the experiment, a respondents' group was selected consisting of 119 people, children of primary school age with auditory sensory deprivation.

For the experiment, children with auditory defects were divided into three subgroups according to the strength of their nervous processes (NP): with a strong NP type, a medium NP type and a weak NP type. The study of all components was performed according to nervous processes strength.

The experimental study was conducted using the method of Гильбух, which included identification of certain traits of behavior and learning.

At this experimental stage, a questionnaire survey of primary school children was conducted to determine the level of academic motivation. The questionnaire survey was performed in a writing form, individually.

As a result of academic performance, brain activity changes, it means processes of excitation and inhibition, motivational and behavioral responses.

We studied correlative relationships that emerged during schooling, after a correctional program and after additional correction for children where influence of neurophysiologic processes was carried out.

Conclusions

1. The results indicate that the level of motivation formation at children with sensory defects is average. That is, 63.02% children from the group of hearing impaired ones have average motivation to attend school, 43 children with hearing defects have the sufficient level of academic motivation, but the motivation is developed due to emotional factors and communicative orientation, i.e. extracurricular activities, that indicates a need for development of children's interest in educational process and teacher's competence

2. We determined the behavioral components with the Table of Гильбух and noted that children from this group have focused enough attention and a high level of behavior (3.54 marks), sufficient total working efficiency (3.29 marks) and responsibility (3.2 marks). Children react normally at educational difficulties (3.57 marks), that indicates their readiness for schooling.

3. Correlations between the components of behavioral responses and formation of the motivation to attend school were determined during corrective training and additional correction, which showed that the learning activity contributes in formation of sufficiently high positive correlations between studied indicators, and additional correction, which influenced on children's neurophysiologic structures and psychomotor system, stimulated spreading of correlations and formation of new ones. A large number of correlations emerged at children with auditory defect and the weak type of nervous processes that indicates a need for additional correction for all groups of children, especially for children with the weak type. Additional correction activate brain structures, has positive effect on behavior, motivational and emotional sphere that is one of the basic conditions of learning activities for children with auditory sensory deprivation.

IV. PSYCHOSOCIAL REHABILITATION

SPEED OF PSYCHOMOTOR REACTIONS OF PUPILS OF THE VOCATIONAL REHABILITATION TRAINING CENTRE

Daiva Mockevičienė, Ilona Dobrovolskytė, Renata Žukauskaitė
Šiauliai University, Lithuania

Abstract

The aim of the research is to assess the change of psychomotor reactions of persons having intellectual disorders by applying individual programmes for development of physical abilities. 12 individuals with mild intellectual disorders and 13 individuals with moderate intellectual disorders who attend the vocational rehabilitation training centre participated in the research. The research was carried out on the ground of linear experiment methods. Assessment of the psychomotor reactions speed was carried out using hardware and software Ergos II Work Simulator. After the first assessment, individual programmes for development of physical abilities have been designed and applied; the main aim of the programmes was to develop psychomotor reactions of people with intellectual disorders by applying physical exercises.

Key words: *psychomotor reactions, intellectual disorder, programme for development of physical abilities, rehabilitation, Ergos II Work Simulator.*

Introduction

Aiming to integrate the disabled into society, the socialisation of the disabled, i.e. participation of the disabled not only in societal but also in occupational activities, is a very important factor. Occupational skills are among the most important preconditions for successful socialisation of people with developmental disorders (Radzevičienė, 2003; Radzevičienė & Jurevičienė, 2008). Social integration of the disabled is inseparable from occupational rehabilitation; it is one of the major and most important priorities of social policy in Lithuania. Occupational rehabilitation of the disabled is a means to involve them into the labour market. Development of physical abilities is one of the fields of occupational rehabilitation of the disabled. Individual's participation in occupational activities depends on the functioning of physical abilities and psychic characteristics; when aiming at high quality labour performance, it is important to develop both physical and psychic characteristics.

According to The International Classification of Diseases (2008), an intellectual disorder is a condition of retarded or unfinished mental development when skills are disordered, manifested in the course of development and determine the common level of intellect, i.e. cognitive, linguistic, motor and social abilities. Persons having intellectual disorders differ from their able contemporaries by their physical and motor characteristics.

Even though development of movements of many of these people is retarded, however, this is more impacted by the cognition factors, difficulties in focusing attention and understanding rather than physiological or movement disorders (Krebs, 2004; Skernevičius et al., 2011). Mal-dexterity and weak balance of people with intellectual disorders may make impact on their abilities to excellently perform various tasks on movements. People with intellectual disorders are less able to spontaneously estimate changed conditions for performance of tasks on movements. Major aspects of performance of a task on movement are the focusing of attention when it is indicated how to carry out a task, and the ability to remember and respond to a given hint – the imitation of a movement. Therefore, aiming to improve exactness of a movement, they need support in understanding and memorising major information related to a movement (Skernevičius et al., 2011).

"Psychomotor reaction is a complex conditional motor reflex which is determined by the functional condition of cerebral hemispheres." (Dadelienė, 2006, p. 200) *Speed of psychomotor reaction depends on complexity of a task and physical, psychic condition of man, also on man's inborn features.* (Muckus, 2006; Baumgartner et al., 2007; Skurvydas et al., 2007) Speed of psychomotor reaction may change due to many factors. This is influenced by various diseases, illnesses, tiredness, change of emotional condition. Also, it changes during age phases: when growing it increases and when aging it decreases. Much significance on psychomotor reaction is borne development of genetic adaptation. Physical activity also has much impact on speed of reaction, i.e. the more a person is physically active, the more this reaction increases (Skurvydas, 2008).

It has been estimated that an intellectual disorder is not an unchanging, fixed condition. Cognition, psychomotor skills and proper behaviour are changing phenomena and it is possible to achieve much higher results than expected if purposefully and actively stimulating them (Skernevičius et al., 2011). All this prompts paying attention to psychomotor peculiarities of people with intellectual disorders and possibilities for their development because this would ease their participation in occupational activities, where high significance is given to the technique of performance.

The aim

To assess the change of psychomotor reactions of people with intellectual disorders applying individual programmes for development of physical abilities.

The object

The change of psychomotor reactions of intellectually disordered pupils of the vocational rehabilitation training centre

Objectives

1. To assess the change of psychomotor reactions of people with mild intellectual disorders.

2. To assess the change of psychomotor reactions of people with moderate intellectual disorders.

3. To assess and compare changes of psychomotor reactions after the rehabilitation (experiment).

Research methods

1. Assessment of speed of psychomotor reactions using software of *Ergos II Work Simulator*.

2. Linear experiment (implementation of rehabilitation program).

3. Analysis of statistical mathematical data (SPSS 19.0; Microsoft Excel 2007)

Research participants

25 pupils (12 female and 13 male) of the vocational rehabilitation centre, including 12 surveyed who had mild and 13 who had moderate intellectual disorders accompanied by other health disorders, participated in the research (Table 1). The average age of the surveyed was 19.6 years.

Table 1. Special educational needs of the surveyed

Special educational needs	Finishers (constructors) N = 10	Hotel staff N = 15
Mild intellectual disorder and other health disorders (visual impairment, heart disease, asthma)	6	6
Moderate intellectual disorder and other health disorders (visual impairment, behavioural and emotional disorders, epilepsy, heart disease, motor development disorders, children's cerebra; palsy)	4	9

Organisation of the research and methods

The research has been carried out following the *methods of a linear experiment*. These methods allow estimating the changes during a certain period of time; provide more possibilities to investigate changes ("from" – "to") than other surveys (Venclovienė, 2010). The research has been carried using hardware and software *Ergos II Work Simulator* (version of 2011) which consists of 3 devices. One of them is designed to estimate psychomotor reactions. This device is used to assess physical occupational abilities and their level defining is a person being surveyed meets the necessary physical requirements posed. This is facilitated by software according to analysis of occupational requirements along with common physical characteristics of a surveyed. The system is fully related to occupational and physical performance (Boadella, Sluiter, & Frins-Dresen, 2003; Baker, 2012)

The research was organised in three stages: *Stage 1* deals with formation of groups and assessment of their psychomotor reactions using hardware and software *Ergos II Work Simulator*; *Stage 2* deals with designing of individual programmes for development of physical characteristics and their implementation; Stage *3* deals with repeated assessment of psychomotor reactions using *Ergos II Work Simulator*.

During the assessment of speed of psychomotor reactions, 4 tests have been carried out: *Reaching, Forward height*; *Standing Bending; Handling Dexterity, Left hand; Handling Dexterity, Right hand.*

The work simulator *Ergos II* compares the results of tests (psychomotor reactions) not requiring force with standards of Methods-Time-Measurement (MTM). Snellen (2010) indicates the following MTM standards:

- 0–70 per cent below competitive;
- 71–80 per cent at the entry level;
- 81–100 per cent competitive;
- over 100 per cent above competitive.

With regard to the results of the first stage, individual rehabilitation programmes for development of physical abilities have been designed; their major set objectives were the following: to apply physical exercises intended for development of balance, coordination, speed of psychomotor reactions; to develop fine motor skills aiming to avoid undergone difficulties at work; to develop observation, attentiveness, coordinated actions and positive responsive actions by physical exercises, working in team and individually; to develop coordinated performance of both hand encouraging various manipulations using hand. Experimental rehabilitation program was applied during 6 month, twice a week under the supervision of physical therapist.

Analysis of the research data has been performed employing the statistical package SPSS (Statistical Package for Social Sciences 19.0). Percentage, rates, average and standard

deviation have been calculated. As the data is not divided according to the normal distribution, for comparison of differences of the indices before and after in the group of the surveyed *Wilcoxon* criterion was employed. The differences were considered as reliable is the probability bias was less than 0.05. To estimate the correlation among indices, *Pearson* correlation coefficient was counted and its statistical significance was estimated (Pukėnas, 2005).

Research results

Changes in surveyed results are analysed according to comparisons of means of psychomotor reactions speed with the estimated criteria before and after the rehabilitation. Also, standard deviation (SD) and statistical significance according to Wilcoxon range criterion are estimated.

Figure 1 presents the mean of psychomotor reactions speed test results of people having mild intellectual disorders before and after the rehabilitation. The mean of psychomotor reactions speed test results is compared to the estimated competitive level (competitive – 81–100 per cent). Having analysed the obtained results, we notice that results of all performed tests were much better after the rehabilitation than before it. Even though results of these tests increased, however, means of surveyed reactions speed did not meet the estimated competitive level. After the rehabilitation, means of tests (reaction to the irritant reaching forward (T1), dexterity of the left hand (T3) corresponded to the level below competitive (0–70 per cent) like before the rehabilitation. Means of the test results on the reaction to an irritant constantly bending (T2), dexterity of the right hand (T4) after the rehabilitation met the entry level (71-80 proc.). It is noticed that changes in speed of psychomotor reactions are even. After the rehabilitation, difference between the mean of results of the test on reaction to the irritant reaching forward (T1) and the estimated criterion decreased by 11.7 per cent; difference of the mean of results of the test on reaction to an irritant constantly bending (T2) increased by 10.9 per cent; and difference of results on dexterity tests of the left hand (T3) and right hand (T4) increased by 13.1 per cent and 7.6 percent. It is observed that difference of the mean of the test on dexterity of the right hand (T4) and the estimated criterion decreased less than in other tests (7.6 per cent).

Figure 1. Changes in speed of psychnomotor reaction of people having mild intellectual disorders (T1 – Reaching, Forward Height; T2 – Standing Bending; T3 – Handling Dexterity, Left Hand; T4 – Handling Dexterity, Right Hand), %

Table 2 presents standard deviation and statistical significance using *Wilcoxon* range criterion data on testing psychomotor reactions speed. Having analysed obtained data applying *Wilcoxon* range criterion, we noticed that results of dexterity of both hands changed statistically significantly (pz=-2.937, p=0.003, r=-0.847); handling dexterity, right hand

(z=-2.609, p=0.009, r=-0.753). Regarding standard deviation, we notice that results of performing these tests were different before and after the rehabilitation; this shows that each person's results were individual.

Table 2. Standard deviation (SD) and statistical significance (p) of tests of psychomotor reactions speed of people having mild intellectual disorders

Tests	SD before rehabilitation	SD after rehabilitation	Statistically significant (p<0.05)
T1 Reaching, Forward Height	21.3	14.4	Statistically insignificant change (p>0.05)
T2 Standing Bending	21.7	19.1	
T3 Handling Dexterity, Left Hand	10.5	12.9	z= -2.937 p=0.003
T4 Handling Dexterity, Right Hand	10.5	14.9	z= -2.609 p=0.009

Figure 2 presents the mean of results of tests on psychomotor reactions of people with moderate intellectual disorders before and after rehabilitation. The mean of results of speed of psychomotor reactions is also compared to the estimated competitive level (competitive – 81–100 per cent). Having analysed the obtained data, we notice that results of all carried out tests after the rehabilitation were much higher than before the rehabilitation. Even though results of these tests increased, nevertheless, means of the surveyed reactions both before and after the rehabilitation do not meet the estimated competitive level of the MTM standard (81–100 per cent). However, we notice that they improved much better than those of people who have mild intellectual disorders. After the rehabilitation, the speed of psychomotor reactions corresponded to the entry level (71–80 per cent). The difference between the mean of results of the test on reaction to an irritator reaching forward (T1) and the estimated criterion decreased until 8.8 per cent, the difference between the mean of results of the test on reaction to an irritator constantly bending (T2) decreased by 7.2 per cent, and the difference between the results of tests on dexterity of the left hand (T3) and right hand (T4) decreased by 8.3 per cent and 5 per cent. It is noticed that means of all tests results before the rehabilitation and after it are distributed evenly; the best psychomotor reactions speed was of the right hand (T4) during the test on dexterity. Also, this change was notices when analysing changes of psychomotor reactions of people having mild intellectual disorders. This may be predetermined by functionality of the dominant hand (right).
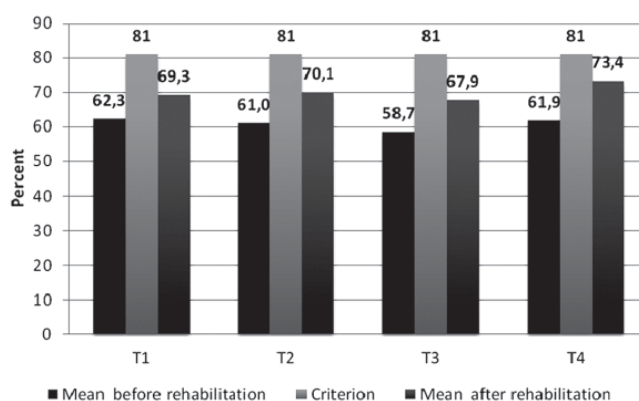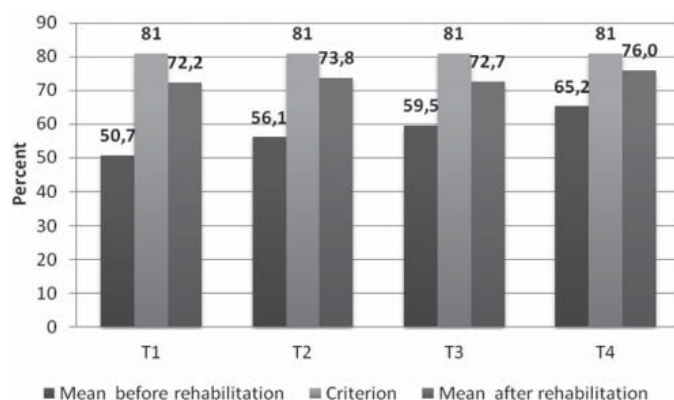

Figure 2. Changes in speed of psychnomotor reaction of people having moderate intellectual disorders, (T1 – Reaching, Forward Height; T2 – Standing Bending; T3 – Handling Dexterity, Left Hand; T4 – Handling Dexterity, Right Hand), %

Table 3 presents standard deviation and statistical significance using *Wilcoxon* range criterion data on testing psychomotor reactions speed. Having analysed obtained data applying *Wilcoxon* range criterion, we noticed that changes of psychomotor reactions speed or people having moderate intellectual disordere changed statistically significantly (p<0.05). Regarding standard deviation, it is noticed that surveyed results of carried out tests before and after rehabilitation were different; this shows that results of each person were individual, like in the case of people having mild intellectual disorders.

Table 3. Standard deviation (SD) and statistical significance (p) of tests of psychomotor reactions speed of people having moderate intellectual disorders

Tests	SD before rehabilitation	SD after rehabilitation	Statistically significant (p<0.05)
T1 Reaching, Forward Height	17.8	18.9	z= -2.867, p=0.004 r=-0.795
T2 Standing Bending	18.9	18.9	z= -2.934, p=0.003 r=-0.814
T3 Handling Dexterity, Left Hand	14.7	15.7	z= -3.182, p=0.001 r=-0.882
T4 Handling Dexterity, Right Hand	15.8	14.0	z= -3.112, p=0.002 r=-0.863

To sum up changes in speed of psychomotor reactions, Pearson correlation coefficient was counted; it revealed a strong correlation relation between tests on reaction to an irritant constantly bending and reaction to an irritant reaching forward (r=0.88), dexterity of the left (r=0.83) and right (r=0.77) hands. The correlation is statistically significant because in all cases it is p<0.05. Analysis of these relations helps to reveal that during the reaction to an irritant constantly bending (methods of test performance) all additional tests covering the remaining 3 tests: reaction to an irritant reaching forward, dexterity of the left and right hands, are involved.

Conclusions

1. Results of people's with mild intellectual disorders psychomotor reactions improved, however, they did not meet the estimated competitive level. Like before the rehabilitation, after the rehabilitation means of tests on reaction to an irritant reaching forward, dexterity of the left hand corresponded to the below competitive level, and means of results of tests on reactions to an irritant constantly bending and dexterity of the right hand after the rehabilitation corresponded to the entry level. Results of tests on dexterity of both hands changed statistically significantly (p<0.05): Handling Dexterity, Left Hand; Handling Dexterity, Right Hand.

2. Results of people's with moderate intellectual disorders psychomotor reactions improved, however, means of surveyed reactions speed did not correspond to the estimated competitive level both before the rehabilitation and after it. After the rehabilitation, speed of psychomotor reactions increased up to the entry level (71–80 per cent). All assessed changes of speed of psychomotor reactions changes statistically significantly (p< 0.05).

3. Assessed psychomotor reactions of people having mild intellectual disorders before the rehabilitation were better than those of people having moderate intellectual disorders. However, after the rehabilitation, psychomotor reactions of people having moderate intellectual disorders increased more in comparison to those of people having mild intellectual disorders. This reveals that psychomotor reactions can and must be developed together will all physical characteristics, especially for mentally disabled people, aiming that their integration into the

labour market would be of a higher quality; because improved psychomotor reactions also improve manipulations with various things, exactness and quality of movements which are inseparable from other activities in occupational performance.

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SPEED OF PSYCHOMOTOR REACTIONS OF PUPILS OF THE VOCATIONAL REHABILITATION TRAINING CENTRE

Summary

Daiva Mockevičienė, Ilona Dobrovolskytė, Renata Žukauskaitė
Šiauliai University, Lithuania

Development of physical abilities is one of fields of vocational rehabilitation of the disabled. Individual's participation on occupational activities depends on functioning of physical abilities and psychic characteristics; aiming at high quality occupational performance, it is important to develop both physical and psychic characteristics. Cognition, psychomotor skills and proper behaviour of people

having intellectual disorders are changing phenomena; by purposefully and actively stimulating them it is possible to achieve higher results than sometimes is expected. All this encourage paying attention to peculiarities of psychomotor skills of people having intellectual disorders as well as to possibilities to develop them because this would make participate in occupational activities, where depend on technique of movements' performance, easier.

The aim of the research is to assess the change of psychomotor reactions of people having intellectual disorders applying individual programmes for development of physical abilities. 12 surveyed who had mild and 13 who had moderate intellectual disorders attending the vocational rehabilitation centre participated in the research. The research was carried out using hardware and software *Ergos II Work Simulator* (the version of) consisting of 3 devices. One of them is dedicated to assessment of psychomotor reactions. During the assessment of speed of psychomotor reactions, 4 tests have been carried out: *Reaching, Forward Height*; *Standing Bending; Handling Dexterity, Left Hand; Handling Dexterity, Right Hand*. The *Ergos II Work Simulator* compares the results of tests (psychomotor reactions) not requiring force with standards of Methods-Time-Measurement (MTM). With regard to the results of the first stage, individual programmes for development of physical abilities have been designed. The research part deals with the changes of speed of surveyed psychomotor reactions before and after the rehabilitation. The statistical analysis (descriptive rates, means, standard deviation, *Wilcoxon* criterion, *Pearson* correlation coefficient) of results has been performed.

After the rehabilitation, speed of the surveyed psychomotor reactions increased; however, it did not meet the estimated competitive level (MTM – 81–100 per cent). Results of psychomotor reaction of people having mild intellectual disorders corresponded to the *below competitive* (0–70 per cent) level (reaction to an irritant reaching forward, dexterity of the left hand), and means of the results of reaction to an irritant constantly bending and dexterity of the right hand after the rehabilitation met the *entry level* (71–80 per cent). Results of tests on dexterity of both hands changes statistically significantly (p *entry level* (71–80 per cent). All assessed changes in psychomotor reactions speed shifted statistically significantly (p< 0.05).

Before the rehabilitation, assessed psychomotor reactions of people having mild intellectual disorders were better than those of people having moderate intellectual disorders. *However, after the rehabilitation, psychomotor reactions of people having moderate intellectual disorders increased more in comparison to those of people having mild intellectual disorders.* This reveals that psychomotor reactions can and must be developed together will all physical characteristics, especially for mentally disabled people, aiming that their integration into the labour market would be of a higher quality; because improved psychomotor reactions also improve manipulations with various things, exactness and quality of movements which are inseparable from other activities in occupational performance.

ESTABLISHING EVIDENCE-BASED PRACTICES IN DISABILITY SERVICES

Melody Tankersley
Kent State University, USA

Abstract

Article presents the theoretical understanding of usage of evidence-based practices in disability service promoting the most effective of practices. The details of identifying, promoting, and implementing EBPs involve a plethora of potentially problematic issues. Detail discussed purports of quality and quantity of the research describes wide application field of EBP. Criterion-based frameworks for determining effective or evidence-based practices could be used as a practical guide in disability services. The essential steps in determining whether a practice is evidence-based seem to be (a) locating the high quality, experimental research that examines the effectiveness of the practice and then (b) determining whether sufficient quantity of evidence showing that the practice causes improved outcomes exists are discussed as well.

Key words: *Evidence-based practices, issues of quality and quantity of the research, disability services.*

Problem of the research

A common concern among professionals who work with individuals with disabilities, their families, and the agencies that provide services to them is the gap between what research shows to be effective and what happens in day-to-day practices. Indeed, the research-to-practice gap seems to be as similar a concern in special education as it does in speech therapy, in rehabilitation counseling, and in adapted physical education.

To bridge the research-to-practice gap, scholars have focused recently on identifying, promoting, and implementing evidence-based practices – instructional approaches, therapies, and interventions shown by high quality research to result reliably in generally improved outcomes for the client or student. An evidence-based practice is one that is supported by a body of trustworthy research that, taken as a whole, demonstrates that the practice is highly likely to meaningfully improve outcomes for individuals with disabilities (Cook, Tankersley, & Landrum, 2009). Determining which practices are evidence-based practices requires a systematic approach to identifying those that are supported by a sufficient number of research studies that (a) are of high methodological quality, (b) use appropriate research designs that allow for assessment of effectiveness, and (c) demonstrate a meaningful body of results through which the cumulative results engender trust that the practice works (Cook et al., 2009).

The idea of evidence-based practices is not new, as criteria and standards for determining them have been developed and applied in other fields, most visibly in medicine (Sackett, Richardson, Rosenberg, & Haynes, 1997) and psychology (Chambless et al., 1998). Although

the use of evidence-based practices in disability services appears to hold great promise for promoting the most effective of practices, and, upon first consideration, even seems to be a straightforward enterprise, the details of identifying, promoting, and implementing EBPs involves a plethora of potentially problematic issues (Cook, Smith, & Tankersley, 2011). For example, questions regarding the types of research designs that can identify evidence-based practices, how many research studies are needed to identify a practice as evidence-based, and how methodological quality can be assessed are among the first questions that must be answered in order to determine which practices are evidence-based.

Object of the research: Establishing evidence-based practices in disability services.

Aim of the research: To discuss theoretical issues of establishing evidence-based practices in disability services.

Goals of the research:

1. to identify qualitative indicators of evidence based practices;
2. to identify quantitative indicators of evidence based practices;
3. to clarify meaning of Evidence-Based Practice process.

Theoretical issues of EBP as a method of research and method of cognition

Although all methods of research are useful and answer important questions, only a few research designs allow us to draw reliable conclusions about whether a particular practice *caused* improved outcomes (Lloyd, Pullen, Tankersley, & Lloyd, 2006). Only experimental studies (i.e., group experiments, quasi-experiments, and single-subject research) can demonstrate that changes in the independent variable cause changes in the dependent variable and provide evidence of the measured impact of a practice on an outcome. Research designs are uniquely suited to answer specific types of questions. Although qualitative designs and relational designs can answer other significant questions, they cannot answer questions related to whether a practice caused a change in learning, social interactions, physical movement, vocational skills, verbal exchanges, or other meaningful events of individuals with disabilities. Group experimental, quasi-experimental, and single-subject research designs can provide evidence of whether a practice is evidence-based.

To claim that a practice *causes* a change in individuals' outcomes, researchers must show that they have demonstrated *experimental control* in the application of the research design (L. Cook, Cook, Landrum, & Tankersley, 2008). Experimental control occurs when the research design has allowed researchers to account for and rule out any explanation for the change in the individuals' performance other than the use of the practice; that is, the only reasonable explanation for change is the use of the practice. Research designs that permit demonstration of experimental control can do so by systematically comparing the outcomes of a group who use the practice against a comparison (or control) group who does not use the practice or by systematically comparing individuals' performance with the practice in place against their performance when it is not used (Creswell, 2002; Rumrill & Cook, 2001).

Although no research design can completely rule out all alternative explanations for the results of applied research, some designs provide more confidence in establishing a cause/effect relationship than do others. By instituting a control group (or a control condition), randomly assigning participants experimental and control situations, and/or systematically and repeatedly introducing the intervention, experimental designs can result in reliable relationships among dependent and independent variables and allow researchers to assert their confidence that an intervention has influenced the outcome (L. Cook et al., 2008).

Quality of research

Determining the evidence-base of a practice not only requires that the research studies supporting the practice exhibit experimental control, but also that the studies are conducted with high quality. If research is not conducted properly, the results can be misleading at worse, or, at minimum, can be meaningless. Although there is not, as of yet, a clear consensus as to the methodological characteristics needed to ensure that experimental research in many disability service fields is rigorously conducted, several of the disability-focused disciplines have begun to propose or implement "quality indicators" for group experimental (Gersten et al., 2005; see Table1).

Table 1. Essential quality indicators of experimental designs proposed by Gersten et al. (2005)

Describing Participants
1. Was sufficient information provided to determine/confirm whether the participants demonstrated the disability(ies) or difficulties presented?
2. Were appropriate procedures used to increase the likelihood that relevant characteristics of participants in the sample were comparable across conditions?
3. Was sufficient information given characterizing the interventionists or teachers provided? Did it indicate whether they were comparable across conditions?

Implementation of Intervention and Description of Comparison Conditions
1. Was the intervention clearly described and specified?
2. Was the fidelity of implementation described and assessed?
3. Was the nature of services provided in comparison conditions described?

Outcome Measures
1. Were multiple measures used to provide an appropriate balance between measures closely aligned with the intervention and measures of generalized performance?
2. Were outcomes for capturing the intervention's effect measured at the appropriate time?

Data Analysis
1. Were the data analysis techniques appropriately linked to key research questions and hypotheses? Were they appropriately linked to the unit of analysis in the study?
2. Did the research report include not only inferential statistics but also effect size calculations?

At the same time several of the disability-focused disciplines have proposed or implemented "quality indicators" for single-subject research (Horner et al., 2005; see Table 2). Quality indicators are design characteristics that are important to address in order to have high confidence in the findings of the study. Said differently, using quality indicators of methodological quality, one can have the highest confidence in the findings of research studies that incorporate them into the designs; therefore, only high quality studies should be considered in determining whether a practice is evidence-based.

Certainly, the methodological rigor with which a study is conducted affects the confidence one can place in its findings. If the intervention was not implemented as designed, no meaningful conclusion can be drawn as to the effectiveness of the practice. To establish evidence-based practices for disability services, one of the first tasks of the research community must be to agree upon and systematically apply a set of quality indicators for methodological rigor, like those proposed by Gersten et al. (2005) and Horner et al. (2005), so that the quality of the research surrounding a practice can be evaluated.

Table 2. Essential quality indicators of single-subject designs proposed by Horner et al. (2005)

Describing Participants and Settings
1. Participants described with sufficient detail to allow others to select individuals with similar characteristics (e.g., age, gender, disability, diagnosis).
2. The process for selecting participants is described with replicable precision.
3. Critical features of the physical setting are described with sufficient precision to allow replication.

Dependent Variable
1. Dependent variables are described with operational precision.
2. Each dependent variable is measured with a procedure that generates a quantifiable index.
3. Measurement of the dependent variable is valid and described with replicable precision.
4. Dependent variables are measured repeatedly over time.
5. Data are collected on the reliability of interobserver agreement associated with each dependent variable, and IOA levels meet minimal standards (e.g., IOA = 80%, Kappa = 60%).

Independent Variable
1. Independent variable is described with replicable precision.
2. IV is systematically manipulated and under the control of the experimenter.
3. Overt measurement of the fidelity of implementation for the independent variable is highly desirable.

Baseline
1. The majority of single-subject research studies will include a baseline phase that provides repeated measurement of a dependent variable and establishes a pattern of responding that can be used to predict the pattern of future performance, if introduction or manipulation of the independent variable did not occur.
2. Baseline conditions are described with replicable precision.

Experimental Control/Internal Validity
1. The design provides at least three demonstrations of experimental effect at three different points in time.
2. The design controls for common threats to internal validity (e.g., permits elimination of rival hypothesis)
3. The results document a pattern that demonstrates experimental control.

External Validity
1. Experimental effects are replicated across participants, settings, or materials to establish external validity.

Social Validity
1. The dependent variable is socially important.
2. The magnitude of change in the DV resulting from the intervention is socially important
3. Implementation of the IV is practical and cost-effective.
4. Social validity is enhanced by implementation of the IV over extended time periods, by typical intervention agents, in typical physical and social contexts.

Quantity of research

Determining evidence-based practices relies on the accumulation of results over time and over different research conditions (e.g., geographic regions, research teams, settings). The accumulation of results that converge toward a generalization of effectiveness provides more confidence than the results of a single study – even if that single study is approached with the highest of rigor and results in a large effect size.

Multiple high quality, experimental studies are needed to conclude that a practice is evidence-based. For example, in special education, Gersten et al. (2005) recommended that at least 4 acceptable quality studies or 2 high quality group experimental studies support an evidence-based practice while Horner et al. (2005) recommended that 5 high quality single-subject research studies support an evidence-based practice. Horner et al.'s recommendation further qualified that to be considered evidence-based on the basis of single-subject research, the practice's minimum of five high quality single-subject studies must (a) be conducted by at least three different researchers in at least three different locations and (b) includes a total of at least 20 participants.

Other disability service fields have also developed and implemented criterion-based frameworks for determining effective or evidence-based practices. For example, the Division 12 Task Force of the American Psychological Association (APA) recommended that for a treatment to be considered well-established, at least one of two empirical criteria must be met (Chambless et al., 1998):

1. Two or more good group design experiments must demonstrate that the treatment is either (a) significantly superior to pill, placebo, or other treatment, or (b) equivalent to a previously established treatment.

2. More than nine single-subject studies demonstrating experimental design and favorably comparing the intervention to another treatment.

Applied research cannot provide absolute proof that an intervention is effective. Instead, the findings of an experimental study can either add support to or weaken the hypothesis that a practice causes meaningful changes in individual outcomes. The more high-quality experimental studies that support a practice, the greater the confidence we have that it causes desired changes. And the more high quality experimental studies that provide consistent findings regarding effectiveness, the greater confidence we have in determining the practice to be evidence-based.

What does being an evidence-based practice mean?

The essential steps in determining whether a practice is evidence-based seem to be (a) locating the high quality, experimental research that examines the effectiveness of the practice and then (b) determining whether sufficient quantity of evidence showing that the practice causes improved outcomes exists.

Being evidence-based does not mean that a practice is guaranteed to work for every individual in every situation (Cook, Smith, & Tankersley, 2011). For example, the findings from a group experimental study might demonstrate that individuals who received an intervention achieved superior outcomes *on average* in comparison to similar individuals in the control group who did not receive the intervention. That does not mean that *every* individual in the experimental group excelled following the implementation of the practice. However, despite this caution, when implemented as designed, we can be confident that evidence-based practices provide the highest likelihood of improving outcomes. To use a gambling analogy, implementing an evidence-based practice is similar to placing a bet that is, say, 95% likely to pay off; whereas, implementing a practice shown by research not to be evidence-based may have, for example, only a 50% chance of paying off. Even though a pay off is not guaranteed

with either strategy, it is clear which is the best bet in the high stakes game of disability services (Cook, Tankersley, Cook, & Landrum, 2008). Accordingly, evidence-based practices should be the first option for practitioners who want to improve outcomes of individuals with disabilities.

Conclusion

Practitioners make the ultimate determination regarding the interventions that individuals with disabilities receive. It is imperative that we use the most effective practices, and that the fields of disability services identify what those practices are so that practitioners can have the greatest impact. As Hammersley (2005) asked, "Who would want…practice not to be based on evidence?" (p.86). The fields of disability services are beginning to identify and stress the implementation of evidence-based practices. Although much important work lies ahead for disability service researchers and practitioners, we will approach these tasks with an optimistic enthusiasm for it is evidence-based practices that provide our students, clients, friends, and family members the best chance of success.

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ESTABLISHING EVIDENCE-BASED PRACTICES IN DISABILITY SERVICES

Summary

Melody Tankersley,
Kent State University, USA

The idea of evidence-based practices is not new, as criteria and standards for determining them have been developed and applied in other fields, most visibly in medicine and psychology. Although the use of evidence-based practices in disability services appears to hold great promise for promoting the most effective of practices, and, upon first consideration, even seems to be a straightforward enterprise, the details of identifying, promoting, and implementing EBPs involves a plethora of potentially problematic issues. For example, questions regarding the types of research designs that can identify evidence-based practices, how many research studies are needed to identify a practice as evidence-based, and how methodological quality can be assessed are among the first questions that must be answered in order to determine which practices are evidence-based.

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Certainly, the methodological rigor with which a study is conducted affects the confidence one can place in its findings. If the intervention was not implemented as designed, no meaningful conclusion can be drawn as to the effectiveness of the practice. To establish evidence-based practices for disability services, one of the first tasks of the research community must be to agree upon and systematically apply a set of quality indicators for methodological rigor, so that the quality of the research surrounding a practice can be evaluated.

RESULTS OF IMPLEMENTATION OF SOCIAL REHABILITATION TECHNOLOGIES FOR PEOPLE WITH LOWER EXTREMITY DISEASES / INJURIES

Svetlana Usca, Velta Lubkina, Aivars Kaupuzs, Lorita Rizakova
Personality Socialization Research Institute
of Rezekne Higher Education Institution,
Latvia

Abstract

People with lower extremity diseases/injuries have limited mobility that affects their participation in socio-economic processes, including integration into the labour market. It is one of the risk groups that are exposed to the risk of social exclusion, and provision of the quality of their life requires the development of protection mechanisms. It is necessary to provide social rehabilitation and support services to facilitate their return to labour market and their involvement in all social activities alike other members of society.

The article focuses on the provision of social rehabilitation services through innovative BIODEX SYSTEM 4, BIOSWAY and Vibro-massage facilities. The results of a linear research have been analysed and a description of case studies has been given.

Key words: *social rehabilitation, lower extremity diseases/injuries, neuromuscular testing and training, balance training and testing, vibro-massage.*

Introduction

21st century will go down into history with the change of view about people with disabilities – from a medical model, which dealt just with a human body and its disorders, to a social model, which perceives every person as a value, regardless of their disabilities. Since there are changes in society's attitude towards people with disabilities, they are able to obtain a good education and work. If this resource is not used, the society will experience losses (Šķestere, Anča, et al., 2008).

Regardless of the statistics on the growing number of disabled people in the world (World Facts and Statistics, 2013) and the change of society's attitude, neither race nor ethnicity causes as many obstacles to career development as it is created by special needs (Mouls, 2003). People with various functional disorders often experience unfair attitude at work (Disability facts and figures, 2013). A great number of people face these obstacles, because approximately 650 million people in the world are disabled or have functional disorders, and about 386 million of them are of working age (World Facts and Statistics, 2013). The statistics of different countries show the increasing number of people with disabilities / persons with functional disorders: for example, in Australia the disability level is 18.5 % of the population

of working age (Advancing the equitable inclusion, 2013), the USA – 12.1%, the UK – 16% (Disability facts and figures, 2013)), one out of eight working-age people in European Union is either a person with a disability or chronic disease, and 78 % of them are outside the labour market (Živitere, 2008).

In Latvia situation is exacerbated by the situation in labour market. In June 2013 there were 94,757 unemployed registered in State Employment Agency. The registered unemployment rate in the country at the end of June 2013 was 9.6%. One out of ten (10.1%) unemployed is the person with disabilities. There is no data about persons with potential disabilities.

World Health Organization (WHO) states that every person may experience temporary or permanent disabilities in their lifetime (World Report on Disability, 2011). Everything mentioned above points to the need to create conditions, which would favour people's with functional disorders involvement in the labour market, because it positively affects a person's self-esteem on their physical work capacity (Chorus, Miedema, Boonen, & Van der Linden, 2003). If it is not provided the society itself creates economic, social and psychological problems, but people with disabilities in case of unemployment have limited or no opportunities to build social and professional relationships (Hernandez, Cometa, Velcoff, Rosen, Schober & Luna, 2007).

To favour persons' with disabilities caused by disease or injury return to work, there were organized rehabilitation measures using BOIDEX SYSTEM 4, BIOSWAY and local Vibro-massage facilities within the project "Designing a Model Geared Towards Participation of People at Risk Social Groups in the Labour Market" (MODPART) "LLIV-223. The paper presents research results.

Methodology and organization of the research
The research was carried out by five researchers, including a physician-rehabilitator and a professional in vibromassage.

There were 25 people involved in MODPART project: 12 men and 13 women, who suffer from lower extremity disease / problems, which belong to 14 different groups of diseases according to disease classification. Despite the diversity of diagnoses, the main problem in many cases is similar, for example, the problem in 5 cases was identified as the joint contracture, in 11 cases – pain syndrome, in 5 cases – instability of the joint after injury, and in 6 cases – ligament disorder.

To implement the project a linear model was selected that provides the acquisition of initial data, theoretically based rehabilitation activities, applying the facilities mentioned above, and response evaluation of one of the research groups in a certain period of time (see Figure 1).

According to the initial examination and a physician-rehabilitator's recommendations individual programs of designated physiotherapy with BIODEX 4 were designed, which prescribed the training sessions of lower limb muscles, balance training with BIOSWAY equipment and massage sessions with local Vibro-massage equipment, exposing on the lower extremity joints and muscles and promoting blood flow to the muscles. To analyze the effectiveness of measures a testing was carried out at the beginning and at the end of the research. The obtained data were coded and processed in SPSS program.
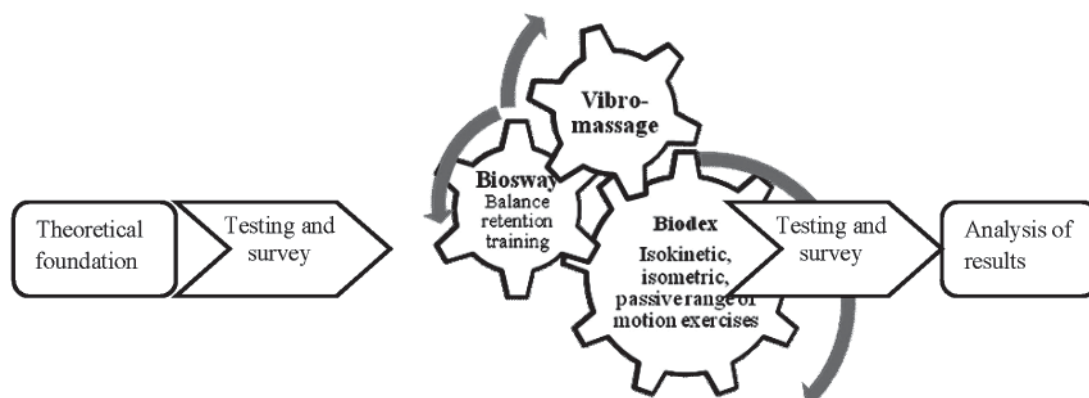
Figure 1. The scheme of linear experiment

Results of the research

In order to obtain the information about the participants' self-rated health a questionnaire was conducted, which included the participating researchers' questions and internationally recognized EQ-5D-5L questionnaire. The results obtained in the survey were coded and processed in the program SPSS 20.0.

Comparing respondents' answers to the questions of internationally recognized questionnaire EQ5-5D-5L at the beginning and at the end of the research, it was concluded that in most cases the problems have not disappeared, but they have decreased (see Table 1).

Table 1. Effectiveness of rehabilitation measures (results of Wilcoxon Signed Rang Test)

Position	Negative Ranks	Positive Ranks	Ties	Asymp.Sig.(p)
Movement abilities	0	15	10	0.000
Self-care	0	9	16	0.005
Daily activities	0	10	15	0.002
Pain	1	15	9	0.001
Anxiety/depression	1	12	12	0.003
Health self-assessment %	2	17	6	0.003

In order to better understand the results of the project the respondents assessed the intensity of problems related. The results are summarized in Table 2.

Table 2. The comparison of intensity of the problem at the beginning and at the end of the linear experiment (Wilcoxon test)

Activity	Negative Ranks	Positive Ranks	Ties	Asymp.Sig.(p)
Daily walking	1	9	15	0.013
Long distance walking	1	9	15	0.010
Short distance walking	1	7	17	0.087
Running	2	6	17	0.084
Climbing several storeys	1	12	12	0.003
Climbing one storey	0	10	15	0.004
Bending	3	12	10	0.010
Getting on knees	2	10	13	0.015
Bending forward	3	15	7	0.004

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				Table 2 (end)
Lifting different objects	0	7	18	0.011
Sitting for a longer time	2	12	11	0.007
Standing for a longer time	1	12	12	0.003
Carrying shopping bags	1	13	11	0.002
Cleaning work	0	8	17	0.007
Self-care	1	8	16	0.020

Using BIODEX SYSTEM 4 technology, testing was done in the same way as it was done at the beginning of the research at 60 deg/sec, 80 deg/sec and 300 deg/sec, focusing on parameters such as peak torque (extension), total work (extension), peak torque (flexion), and total work (flexion). Testing results obtained by the help of devices using Wilcoxon test indicate a positive dynamics (see Table 3).

Table 3. BIODEX SYSTEM 4 testing results (Wilcoxon test)

Tests	Negative Ranks	Positive Ranks	Ties	Asymp. Sig. (p)
peak torque (extension)				
60 deg/sec	0	14	1	0.001
180 deg/sec	0	15	0	0.001
300 deg/sec	0	14	1	0.001
total work (extension)				
60 deg/sec	0	12	3	0.002
180 deg/sec	0	15	0	0.001
300 deg/sec	0	15	0	0.001
peak torque (flexion)				
60 deg/sec	0	11	4	0.003
180 deg/sec	0	7	8	0.018
300 deg/sec	0	4	11	0.059
total work (flexion)				
60 deg/sec	0	8	7	0.010
180 deg/sec	0	7	8	0.018
300 deg/sec	1	8	6	0.013

The results show that with the exception of one position (total work (flexion) at 300 deg/sec) there is a positive dynamics. This suggests that the selected training modes increase patients' lower extremity muscle strength, facilitate the improvement of their health, wherewith a faster return to work.

The results of testing with the equipment BIOSWAY show that after training session the balance control has improved: 12 patients' result is above 65% (in the first testing only one patient showed such a good result). The results of Wilcoxon test give the evidence of balance control improvement dynamics (see Table 4).

The positive dynamics is the result of the rehabilitation measures applying local Vibro-massage device, because vibromassage locally accelerates blood flow, enhancing blood flow to certain parts of the body, excites the nerves that have lost their operational capacity, and vice versa. Transient vibration applied every day can increase muscle strength and their capacity and can hasten the healing process (Ciematnieks, 2011).

The results show that well-balanced and complex application of all devices purchased in MODPART project facilitates social rehabilitation process and helps people with lower extremity injuries or disease return to work.

The efficiency and effectiveness of a complex application of BIODEX SYSTEM 4, BIOSWAY and Vibro-massage devices are proved by the data obtained in the result of retesting with BIODEX SYSTEM 4 after the rehabilitation session. It showed significant differences in peak torque (flexion) at 60 deg/sec (p = 0.043), total work (flexion) at 60 deg/sec (p = 0.042), peak torque (extension) at 180 deg/sec (p = 0.014) and total work (flexion) at 300 deg/sec (p = 0.049). In all cases the higher mean rank could be observed when all three devices – BIODEX 4, BIOSWAY and Vibro-massage device were applied, lower results appeared when two devices were applied – BIODEX 4 and BIOSWAY technology, but even lower results were achieved when BIODEX 4 and Vibro-massage device were used.

Table 4. Balance control improvement dynamics

Tests	Negative Ranks	Positive Ranks	Ties	Asymp. Sig.(p)
Limits of stability testing				
Total result	0	17	5	0.000
Anterior movement	1	18	3	0.000
Posterior movement	2	13	7	0.006
Movement to the right	3	13	7	0.008
Movement to the left	3	17	2	0.008
Postural stability testing				
Total deviation	1	13	8	0.002
Deviation forward and backward	0	12	10	0.001
Deviation to the right and to the left	1	9	12	0.013
Test of sensory integration of balance				
Firm surface, eyes open	2	13	12	0.003
Firm surface, eyes closed	3	17	2	0.013
Foam surface, eyes open	2	14	6	0.008
Foam surface, eyes closed	3	15	4	0.011

To better understand how the rehabilitation measures were organized, we offer to look at a detailed description of one patient's activities.

Patient V-EL, age – 32.

Doctor's diagnosis: Right leg knee joint cross ligament rupture (August 10, 2012). The injury was sustained while doing sports, during football training. Autotransplantation was carried out on October 3, 2012. Prior to the participation in MODPART project the patient V-EL had an initial rehabilitation course (20 sessions).

Before V-EL's participzation in the project, during medical examination a physician-rehabilitator identified the patient's major problems: pain, distress symptoms, instability, and muscle weakness. These problems are also identified in initial testing using BIODEX SYSTEM 4 and BIOSWAY equipment.

After initial testing with BIODEX SYSTEM 4 equipment in a three-speed (60⁰/s-180⁰/s-300⁰/s) isokinetic mode it was discovered that there was a significant muscle strength parameter deficit in the traumatized leg. The extensors of the traumatized leg (the right one) were 40 % weaker than the ones of the healthy leg. There were no significant differences in flexors, i.e. in the range of 13%. Analyzing the muscle strength parameters of the healthy leg (the left

one), it was determined that hamstring muscles are significantly weaker than quadriceps. Poor hamstring development is an important risk factor for possible knee injuries because they are not able to effectively slow down the movement of the lower leg caused by the strength of the quadriceps muscles. This may be the reason for muscle sprains and ligament injuries. The peak torque deficit in traumatized leg has significantly influenced other parameters in the test, i.e. capacity and total work results of the right leg were significantly lower (approx. 35 to 40%).

The initial testing was carried out using BIOSWAY equipment. The results point to balance disorders: the results of Postural stability test show that the total deviation from the centre is 0.6 (standard deviation is 0.1-0.2), in Limits of stability test problems in control of the centre of gravity were identified. Test of sensory integration of balance indicates that sway index does not meet the standard in all four positions (see "Technology for balance testing and training, its implementation methodology".)

A physician-rehabilitator set rehabilitation goals for the patient V- EL: to strengthen the muscles of the right leg, to strengthen hamstring muscle group of the left leg, to stabilize the knee joint of the right leg, to improve trophics and coordination. To achieve the goals a rehabilitator prescribed a training session using BIODEX SYSTEM 4, BIOSWAY and local Vibro-massage facilities, and elaborated an individual rehabilitation program. The course of rehabilitation procedures carried out in the project was recorded (see Table 5).

Before training with BIODEX SYSTEM 4 equipment a general warm-up workout was done on an indoor stationary bike (5 min.) at a moderate pace and leg muscle stretching exercises (2 min.).

Right leg exercise mode:

An isokinetic Biofeedback mode up to 75% fatigue level, with gradual increase and reduction in speed. Since the patient has already had initial rehabilitation and there was no limitation of movements, a fast motion mode was chosen, which is functionally more appropriate.

$180\,^0/s – 210^0/s – 240^0/s – 270^0/s – 300^0/s – 300^0/s – 270^0/s – 240^0/s – 210^0/s – 180^0/s$

The rest between exercises is 45 seconds or subjectively to normal breathing rhythm.

Peak torque – Nm, total work – J and coefficient of variation (Coeff. of var.%) were recorded in the exercise protocol.

Left leg hamstring muscle development program was divided into two phases. In the first phase an isokinetic Biofeedback mode up to 75% fatigue level was also selected, with a gradual increase and reduction in speed, but the velocity of up and down movements was different. In order to put an emphasis on hamstring muscle work upward movement was faster, which is done with less torque, but the movement down was slower providing the opportunity to realize a larger effort.

Left leg exercise mode Move Up:

$180^0/s – 210^0/s – 240^0/s – 270^0/s – 300^0/s – 300^0/s – 270^0/s – 240^0/s – 210^0/s – 180^0/s$

Left leg exercise mode Move Down:

$60\,^0/s – 90^0/s – 120^0/s – 150^0/s – 180^0/s – 180^0/s – 150^0/s – 120^0/s – 90^0/s – 60^0/s$

Rest between sets – 45 seconds or subjectively to normal breathing rhythm.

Assessing the results of the first five sessions, it was concluded that initially with the improvement of torque results the amount of total work decreased, but in the fifth session it increased again because of the reduction of torque parameters. Therefore, after obtaining the interim testing results, it was decided to change the kind of activities and to include eccentric muscle resistance mode.

Training program was supplemented with the following parameters:

flexion – $120^0/s$ – isokinetic mode;

Table 5. Patient's V-EL individual rehabilitation program

	Mode	Times	Date (minutes)
Biodex 4	Initial testing	1	13.05.13. – 60 min.
	Warming up	110 .	14.05.13. – 60 min. 17.05.13. – 60 min. 20.05.13. – 60 min. 22.05.13. – 60 min.
	Left leg knee. Isokinetic load flexors/extensors $180^0/s/60^0/s – 210^0/90^0/s – 240^0/120^0/s – 270^0/150^0/s – 300^0/180^0/s$ $300^0/180^0/s – 270^0/150^0/s – 240^0/120^0/s – 210^0/90^0/s – 180^0/s/60^0/s$		
	Right leg knee. Isokinetic load flexors/extensors $180^0/s – 210^0 – 240^0 – 270^0 – 300^0 – 300^0 – 270^0 – 240^0 – 210^0 – 180^0/s$		24.05.13. – 60 min. 27.05.13. – 60 min. 29.05.13. – 60 min. 31.05.13. – 60 min. 03.06.13. – 60 min. 05.06.13. – 60 min.
	Final testing	1	07.06.13. – 60 min.
Biosway	Initial testing (assessment of functional condition, rehabilitation program)	1	13.05.13. – 60 min.
	Exercises (on a firm platform on PST, WST, WBT, MCT, RCT mode; on a foam platform in PST, WST, MCT mode)	110	13.05.13. – 25 min. 14.05.13. – 35 min. 20.05.13. – 35 min. 24.05.13. – 35 min. 27.05.13. – 35 min. 31.05.13. – 35.min. 03.06.13. – 35 min. 07.06.13. – 35 min. 20.06.13. – 35 min. 27.06.13. – 35 min.
	Final testing	1	27.05.13. – 20 min.
Vibro-massage	8 procedures		13.05.13. – 35 min 03.06.13. – 35 min. 04.06.13. – 35 min. 21.06.13. – 35 min. 25.06.13. – 40 min. 26.06.13. – 40 min. 27.06.13. – 40 min. 28.06.13. – 40 min.

extension $10^0/s$ – eccentric resistance with effort to 65Mm;
training time – 10 minutes;
number of sets – 6.

Using BIOSWAY equipment, the patient V-EL was offered a workout program that included Postural stability training, Limits of Stability Training, Weight Shift Training, Maze Control Training; Random Control training and Percent weight Bearing Training.

Applying vibro-massage device, the following procedure modes were used:

• vibromassage with a conic vibratod; 4 procedures were carried out, in the first two procedures the vibration level was 60 Hz, in the next two – 80 Hz .

• vibromassage with an iron vibratod; in the first two procedures the vibration level was 100 Hz, in the next two 100 Hz .

At the end of vibromassage session, basing on the interviews with the patient V-EL, it was found that he felt better, the pain had decreased, a range of motion in the joint had improved, muscle and ligament tension had decreased, leg muscles had become stronger, and muscle endurance had increased. Survey results showed a positive dynamics, too. If at the beginning of the research the patient V-EL assessed his current state of health by 65 %, the score at the end of the project amounted to 80%. Furthermore, the problems the patient V-EL faced, when he had to get on his knees or to carry the shopping bag, have reduced.

Undeniably, it is the result of using all three devices purchased in MODPART project. The results obtained in the final testing with BIODEX SYSTEM 4 and BIOSWAY equipment prove that the patient's V-EL state of health has improved.

Obtaining the results of final testing with BIODEX SYSTEM 4 equipment it can be concluded that there was a significant improvement in the results compared to the initial testing results (see Table 6).

Table 6. Initial and final testing results of isokinetic mode

Velocity Motion mode: extension		60^0/s			180^0/s			300^0/s		
Testing date		13.05.	07.06.	%	13.05.	07.06.	%	13.05.	07.06.	%
Torque	Nm	246.3	238.0	-3.4	157.1	165.6	5.4	122.1	118.4	-3
Coefficient of variation	%	18.4	6.8		7.1	10.5		12.9	13.6	
Total work	J	1120.1	1471.5	31.4	1837	2118	15.2	2056	2230	8.4
Max. work in one set	J	253.3	327.2	29.2	206	244	18.5	164.2	182.5	11.2
Velocity Motion mode: flexion		60^0/s			180^0/s			300^0/s		
Testing date		13.05.	07.06.	%	13.05.	07.06.	%	13.05.	07.06.	%
Torque	Nm	102.0	120.5	18.1	71.7	95.2	33.3	72.8	75	3
Coefficient of variation	%	13.6	2.4		6.2	8.8		27	15	
Total work	J	524.4	877.1	67.3	882	1289	46.1	1037	1335	28.6
Max. work in one set	J	122.3	186.3	52.4	96.2	141.8	47.5	85	111.9	31.6
Agonist/antagonist ratio	%	41.4	50.6	18.2	45.5	57.5	20.9	59.6	63.3	5.5

In the Table 6 we can see that the torque results of quadriceps after 11 sessions have not significantly changed, but the level of muscle performance has significantly improved (8.4%–31.4%). Hamstring muscle results have significantly improved in all parameters and at all speed modes. Peak torque has increased by an average of 18% (3%–33.3%), muscle power improved by nearly half (28.6%–67.3%), and the maximum effort per set has increased by 44% (31.6%–52.4%).

The results of testing with BIOSWAY equipment show positive dynamics, too. Postural stability test (see Table 7) indicates the patient V-EL's ability to maintain the increase of balance centre, because deviation from the centre has reduced (the lower the score, the better).

Table 7. Patient V-EL's results in Postural stability test

	Initial testing	Final testing
Total	0.6	0.4
Forward - backward	0.5	0.4
To the right – to the left	0.2	0.1

Patient V-EL carried out Limits of Stability Test in moderate mode. The results of the test (see Table 8) show a positive dynamics.

Table 8. Patient V-EL's results in Limits of stability test

	Initial testing	Final testing
Total	36	75
Forward	34	64
Backward	69	76
To the right	34	60
To the left	27	40

In the first or initial testing the results were below the acceptable range (score was less than 65 points). Second or final testing results show that the patient V-EL's dynamic balance has improved by 75%.

The patient V-EL's results in Test of sensory integration of balance (see Table 9) show that sway index has improved in all 4 positions. It has become smaller, indicating a stable dynamics and the patient's sway reduction.

Table 9. Patients V-EL's results in Test of sensory integration of balance

	In the beginning	In the end	Standard
Eyes open, firm surface	0.50	0.36	0.21-0.48
Eyes closed, firm surface	1.53	0.71	0.48-0.99
Eyes open, foam surface	0.70	0.54	0.38-0.71
Eyes closed, foam surface	2.19	1.98	1.07-2.22

The obtained results confirm the compliance of the applied methodology with the tasks set before the project. In the result of training session a significant improvement can be observed in both hamstring muscles and quadriceps of the traumatized leg. While in the other leg the agonist and antagonist muscle group ratio has significantly improved, which reduces the risk of injury. Static and dynamic balance has improved wherewith the patient feels much better and he has returned to active mode, i.e. to the labour market.

Conclusions

1. The statistics on the increasing number of disabled people in the world and Latvia define the need to create conditions for social rehabilitation and support services thus facilitating people's with disabilities integration into labour market and involvement in social activities alike other members of society.

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2. The analysis of results obtained in linear research reveals a positive dynamics and significant changes: lower extremities muscle strength increases, balance control and feeling of participating people with lower extremity injuries/diseases improve.

3. The results of analysis obtained in linear research of MODPART project indicate that well-balanced and complex use of innovative BIODEX SYSTEM 4, BIOSWAY and Vibro-massage equipment improves people's with functional disorders state of health, thus favouring their involvement in social activities and return to the labour market.

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RESULTS OF IMPLEMENTATION OF SOCIAL REHABILITATION TECHNOLOGIES FOR PEOPLE WITH LOWER EXTREMITY DISEASES / INJURIES

Summary

Svetlana Usca, Velta Lubkina, Aivars Kaupuzs, Lorita Rizakova
Personality Socialization Research Institute of Rezekne Higher Education Institution, Latvia

People with lower extremity diseases/injuries have limited mobility that affects their participation in socio-economic processes, including integration into the labour market. It is one of the risk groups

that are exposed to the risk of social exclusion, and provision of the quality of their life requires the development of protection mechanisms. It is necessary to provide social rehabilitation and support services to facilitate their return to labour market and their involvement in all social activities alike other members of society.

The article focuses on the provision of social rehabilitation services through innovative BIODEX SYSTEM 4, BIOSWAY and Vibro-massage facilities. The results of a linear research have been analysed and a description of case studies has been given.

There were 25 people involved in MODPART project: 12 men and 13 women, who suffer from lower extremity disease / problems, which belong to 14 different groups of diseases according to disease classification. Despite the diversity of diagnoses, the main problem in many cases is similar, for example, the problem in 5 cases was identified as the joint contracture, in 11 cases – pain syndrome, in 5 cases – instability of the joint after injury, and in 6 cases – ligament disorder.

To implement the project a linear model was selected that provides the acquisition of initial data, theoretically based rehabilitation activities, applying the facilities mentioned above, and response evaluation of one of the research groups in a certain period of time.

According to the initial examination and a physician-rehabilitator's recommendations individual programs of designated physiotherapy with BIODEX 4, were designed which prescribed the training sessions of lower limb muscles, balance training with BIOSWAY equipment and massage sessions with local Vibro-massage equipment, exposing on the lower extremity joints and muscles and promoting blood flow to the muscles. To analyze the effectiveness of measures a testing was carried out at the beginning and at the end of the research. The obtained data were coded and processed in SPSS program.

Conclusions

1. The statistics on the increasing number of disabled people in the world and Latvia define the need to create conditions for social rehabilitation and support services thus facilitating people's with disabilities integration into labour market and involvement in social activities alike other members of society.

2. The analysis of results obtained in linear research reveals a positive dynamics and significant changes: lower extremities muscle strength increases, balance control and feeling of participating people with lower extremity injuries/diseases improve.

3. The results of analysis obtained in linear research of MODPART project indicate that well-balanced and complex use of innovative BIODEX SYSTEM 4, BIOSWAY and Vibro-massage equipment improves people's with functional disorders state of health, thus favouring their involvement in social activities and return to the labour market.

SPECIFIC APPROACH TO CHILDREN
WITH BEHAVIOURAL PROBLEMS

Miluše Hutyrová
Palacky University Olomouc, Czech Republic

Abstract

This is a qualitative research study focused on the issue of children with behavioural problems in the Czech Republic. It represents a collection of complete opinions of experts from various professions on the manifestations, causes and possibilities of diagnostic and, in particular, intervention methods in these children. The goal of the study was to define the time-proven approaches, methods and forms of work that could be generalized and recommended as examples of good practise for working with the given target group under the conditions of schools and school consulting facilities.

Key words: *behavioural problems, behavioural disorders, a child with a behavioural problem, manifestations of hyperactivity, impulsiveness, and aggression, attention disorders, institutions, family environment*

Introduction

In the Czech Republic, the concept of behavioural problem or behavioural disorder is usually understood as a negative deviation from the standard regarding the manifestations of a child's behaviour. Various terms have been used from different classification systems – behavioural disorder, behavioural problem, hyperkinetic disorder, specific and unspecific behavioural disorder, ADHD.

The question remains as to what is the actual behavioural standard. Lechta states that the concept of standard, if understood as fiction, pertains to the indispensable manifestations of heterogeneity in children in schools and school facilities (Lechta, 2010). On the other hand, it is necessary to define the standard for the society to function as a whole. The behavioural standard is anything that is evaluated as common and is expected or presumed in the given individual. The expectation is influenced by the child's age, the situation in which he/she expresses himself/herself, and the cultural effects. We can never evaluate an individual's behaviour without his/her social context (Pokorná in Hadj-Moussová, 2004; Lechta, 2010).

The term behavioural disorder should have clearly set defining criteria; otherwise, various phenomena could be included, sometimes as standard development, and other times as the manifestations of temporary social maladjustment, and, finally, as clearly antisocial behaviour (Hort et al., 2000; Paclt at al., 2007; Richter et al., 2012).

Conversely, the concept of ADHD or hyperkinetic disorders (note: in the Czech Republic, the 10th revision of the International Classification of Diseases is used, but the term ADHD

from another classification system is also commonly used) includes behavioural disorders developed by the influence of various external and internal factors on the basis of the existing proven debilitation or changesto the central nervous system.

Current description (Czech Republic)

We can state that despite all efforts, there still persists a non-uniform approach between school and healthcare facilities dealing with the issue of behavioural problems, behavioural disorders and ADHD in the Czech Republic.

We can also notice a non-uniform terminology used in this sphere – medical, psychological, special education; however, all these divisions are justified and make sense. With regard to the importance of an interdisciplinary approach and the indisputable requirement for not only diagnostic but also therapeutic approaches to children with problematic behaviour being complex, we stem from the division of behavioural disorders in the classification system according to the International Classification of Diseases, 10th revision.

Research goals

The goal of the research was to collect the views, opinions and attitudes of experts from various professions (special educators, ethopedists, consulting, clinical and school psychologists, social workers and curators, psychiatrists, psychotherapists) with respect to the manifestations, causes and the possibilities of diagnosis and intervention in children with behavioural problems.

We were looking for time-proven approaches, methods and forms of work that could be generalized and recommended as examples of good practise. These can also include specifying the pitfalls and risks of universalizing these procedures, approaches and methods and, last but not the least, the search for inspiration for professional work with children having behavioural problems.

Addressing the problem; formulation of research issues

As stated in the previous text, the noticeable behaviour, behavioural problems, behavioural disorders, and disordered emotions constitute a semantically non-uniform context which, on the one hand, causes professional, contextual and formal fragmentation, but, on the other, shows that it is not possible to determine and recommend methodological procedures, methods and programmes resulting in a positive change in the child's behaviour if applied to a child with a behavioural problem.

We tried to formulate four spheres in which we defined the causes and manifestations of problematic behaviour, the period when a problem arises, the bearer of the problem, how the problem is exhibited in the child's behaviour, how it is manifested, and the child's emotional experience relevant to the problem. We focused on the evaluation, diagnosis, programmes and methods that work, and onthepossible examples of good practise duly recommended by the respondents. The following research issues ensued from these spheres:

• Which spheres of the child's manifested problematic behaviour are the most noticeable and have the decisive influence on his/her social relationships?

• Is the child's schoolwork and success influenced by the manifested problematic behaviour?

• Is it necessary to create special diagnostic batteries for diagnosing and evaluating the manifestations of children's problematic behaviour (in the sphere of social relationships, emotional experiencing, empathy, cognitive functions, etc.)?

• Can the professionals' experience in the used methods, programmes, approaches and techniques be generalized as example of good practise?

- Is it possible to refer to these examples of good practise as recommended procedures for working with children with behavioural problems?

Used methods

The research used the qualitative research methods. We believe that they satisfy the requirement for methods of collecting data as being open, and place emphasis on the subjective importance and interpretation.

The goal was to obtain a complex and broad description of the professionals' experience, focused on the specifics of children with behavioural problems, the experiencing of the problem itself and its bearer, the child's subjective experiencing, and the professionals' attitudes to these children or the given problem. The method of semi-structured interview was applied.

Selection of informants; group characteristics

We applied the method of intentional selection. It is a procedure aimed at looking for participants based on their certain characteristics. The selection criterion included the selected characteristic feature or its exhibition.

Basic selection criteria:

- Obtain the broadest possible range of professionals working with the given target group, having diverse experience as to its length and focus, and holding various positions.
- The informant is able to formulate his/her experience and evaluate the suitability of its generalization.
- The informant is willing to be interviewed.

Interview structure

The structure of the interview stemmed from the concept of spheres ensuing from the research questions, and four spheres were set.

The **first sphere of questions (What is it?)** focused on definingnoticeable behaviour when the noticeable element becomes a problem, specifying the perception and conception of the term behavioural disorder from the respondent's perspective, naming the bearer of the problem, and perceiving child's personality and the disharmonic development of personality. It also focused on characterizing the child's family and the school environment and his/her relationships with peers and authorities.

The **second sphere of questions (How is it for a child and the people around him/her?)** was devoted to the manifestations of the child's problematic behaviour. We wanted to know the participating persons' opinions on these children's relationships in the school environment, success and failure, and how they were related to these children's experience and satisfaction.

The **third sphere of questions (How is it recognizable?)** was characterized by the possibilities of evaluation and diagnosis – in the school environment, consulting services, diagnostic institutes, etc., being both psychological and special education or, possibly, neurological and pedopsychiatric.

The **fourth sphere of questions (What can be done about it?)** looked for the possibilities of using therapeutic and psychotherapeutic approaches, training programmes, recreational activities, and the measures of integrating a pupil with a specific behavioural disorder into special schools and classes for these children.

Research course

The collection of data took place from June 2012 to May 2013. Fourteen interviews with 14 informants were undertaken. The informants were selected intentionally from the

whole Czech Republic. The main endeavour was to obtain their most varied sample. One of the selection criteria was at least ten-year experience in working with the given target group. Differences consisted in the profession, position, sex and education. The respective informant was informed about the implemented research and its purpose, and the date of the interview was pre-agreed with him/her. The course corresponded to the usual phases of an interview, from the preparatory phase through the core up to the conclusion and completion. The obtained data was fixed through Dictaphone and each respondent's anonymity was guaranteed. The fixing of data created material that was subsequently processed accordingly.

Results and analysis of the research

The process of analysing and interpreting is associated with procedures the aim of which is to minimize the risk of unreasonable distortion that may arise by processing, analysing or interpreting qualitative data.

1. Perception and conception of children's behavioural problems

The first sphere of questions focused on specifying how individual informants perceived the terms behavioural disorder, behavioural problem or noticeable behaviour. All of the 14 informants provided their opinions, but each of them accentuated a different sphere – behavioural disorder, noticeable behaviour, specific exhibitions (attention disorder, hyperactivity, impulsiveness, aggression) in the context of the child's family, school, and teachers and, last but not the least, in the context of the child himself/herself. They considered the fact as to which individual manifestations of problematic behaviour in a given environment disrupted most the common functioning of the child and his/her class and family, what kind of families the children manifesting problematic behaviour came from, and who could do what to resolve the problem. The informants did not indisputably exceed the framework of the given sphere. The influence of their profession and position was strongly evident, and not all of them reacted to all the available spheres of questions. One of the informants pointed out: *"I don't like using labels..."* (informant No. 14)

- **Noticeable behaviour**

Three informants (out of 14) reacted to the issue of noticeable behaviour. The following statement was the most typical: *"The child's noticeable behaviour exceeds expectations with regard to the child's age or the child does not get on well with anybody anywhere."* (informant No. 3)

- **Behavioural disorder**

Twelve informants out of the 14 provided their opinions in this context. Their answers were manifold. Eleven respondents differentiated between behavioural disorders and ADHD, and only one of them stated: *"The real behavioural disorder is hyperkinetic or hypokinetic only when the problems are reflected in the schoolwork."* (informant No. 5)

The most frequent answers could be expressed or summarized by the following statement: *"... behavioural disorder is a state when the child stops functioning, is unable to make friends, has no relationships, everything goes together – the behaviour, relationships, emotions, learning, failure, and behaviour without restraints. Nothing works in this child and one must wait until the emotions fade away."* (informants No. 1 and 11)

Twelve informants out of the 14 agreed that the most frequent manifestations of problematic behaviour included truancy, theft and aggression.

- **Behavioural problems**

Ten out of the 14 informants commented on behavioural problems from the perspective of when noticeable behaviour became a problem, and on who was the bearer of the problem, whether a family member, the teachers or the child himself/herself. Informant No. 5 stated an

original opinion: *"Many children labelled as behaviourally disordered do not actually have a behavioural disorder, but their problems stem from the boundless upbringing or its bad system showing that the parents do not bring up their children towards moral values."* This informant also used an original to-the-point term "disordered upbringing".

In the context of the above categories, the respondents also provided opinions on the school and the prevailing family environments, both the child's and the teacher's personality, authority and power or helplessness, and the development-related phenomena.

- **School environment**

All of the 14 informants provided their opinions on the teacher's personality, authority and power rather than on the school environment in general. Some of them also addressed the relationships in the class and the relationships between an individual and a group. They agreed that teachers did not know how to deal with children manifesting behavioural problems whensuch manifestations of problematic behaviour disturbed the teaching process. Five out of the 14 informants stated that children with behavioural problems did not respect the teacher's authority, and 3 informants agreed that teachers could not express respect towards the children. Informant No. 3 stated as follows: *"...teachers express allergy towards children."* Informant No. 7 remembered the teachers' different ages: *"Younger teachers have a closer relationship with children, but their classes are chaotic since they are not able to click the children into shape in the sense of their work obligations. Conversely, older teachers take account of these children, but not in the way that would be suitable. They are able to reduce the quantity and the contents, but not the attention – the child then destroys the whole structure of a lesson."*

Four out of the 14 informants reacted to the power and helplessness in relation to both pupils and teachers. Informant No. 14 stated the following: *"These children strongly feel the need for protecting their helplessness and often manifest aggression. Aggressors strongly need the position of power since such position legally enables the strengthening of this principle."*

Informant No. 11 stated an original opinion: *"...teachers do not express attitudes but only play their role and confuse the role with personality, which is more noticeable in women – teachers."*

- **Family environment**

Most informants referred to behavioural problems being associated with the family environment. Twelve informants expressed their opinions in the family context, six of whom agreed that if the parents did not cooperate, the child could not be approached efficiently either: *"...if the parents do not cooperate, it leads nowhere"* (respondent No. 2) or *"...without the family's correction, every effort is futile"* (respondent No. 12). Two more informants agreed that *the percentage of the family functioning correctly was infinitesimal*in children included in school facilities to undergo institutional education (informants No. 12 and 13). The other statements were unique, original and inspirational, for example: *"The parents do not like the fact that the school is picking on them, which results in them not attending school meetings and being reluctant to hear negative news about their children again and again. They are not sure whether they are good parents and have doubts about their role."* Note: 97% of elementary school teachers in the Czech Republic are women.

- **Hyperactivity manifestations, attention disorders, aggression, impulsiveness**

The informants paid most attention to the issue of attention that was addressed by six out of the 14 informants. The statement expressed by informant No. 8 was fitting: *"... concentrating attention is physically exhausting, even painful, for a child. It is difficult for a child to stay attentive for 4 hours."* Five informants accentuated both the physical and verbal manifestations of aggression. Three informants commented on hyperactivity and three informants noted that these children experienced problems not only in their relationships with authorities, but, in particular, with their peers: *"They cannot make friends."* Two informants

referred to the fact that children with behavioural problems did not respect and have no boundaries. Two informants agreed to the opinion that these children committed crimes. One of the informants stated that they most disliked these children's aggression accompanied by impulsiveness.

2. What are the manifestations of problematic behaviour for a child and the people around him/her?

The second sphere of questions focused on how problematic behaviour was perceived by the child himself/herself, his parents, siblings and close relatives, how the behavioural problems were manifested, what the child and the people around him/her did not like, and how his/her day-to-day life was disrupted. Among other things, we also focused on these children's school success and failure, and their satisfaction with schoolwork.

Again, the topics penetrated into other spheres of questions. What is interesting is that the answers reflected the respondents' experience acquired within their work and oftentimes related to the institution where they work.

- **Family**

The family and the importance of its role in a situation of a child with a behavioural problem were dealt with by 11 out of 14 informants. In their statements, all of them expressed the opinion that the parents' role was crucial. If the parents do not cooperate with other institutions, it is very difficult to expect a positive change in the child's manifested behaviour. Most opinions were characterized by the following statement: *"A family is psychosocially disrupted if ADHD vaults over a behavioural disorder. These families are not functional and do not provide support. In particular, mothers fail."* (informant No. 1)

As stated by informant No. 13: *"for working with the family, family therapy is effective, but it is hardly ever implementable."* Or informant No. 6: *"Many parents do not perceive the child's problematic behaviour as a problem and have different social norms."*

- **Institutions – Pedagogical Psychological Consulting Room, Body for Social Legal Protection of Children, School, Teachers' Assistants**

This sphere of questions was considered by 12 out of 14 informants. The spectrum of answers was broad. Each inoformant defined his/her answer from his/her point of view. The answers were original and each respondent accentuated something different based on which a varied range of answers was created. An identical opinion was expressed only by those working in the same positions, for example, social curators or school consultants. Four informants (out of 14) expressed their opinion on the topic of teachers' assistants in children with ADHD or a behavioural disorder. For example: *"If the child does not talk with an assistant, it is very problematic..., I attend therapy so as not to have an assistant..."* (informant No. 7), which was also completed by informant No. 6: *"....the assistant must talk not only with the child but also with the teacher."* The importance of teacher's personality is highlighted by the statement of informant No. 11: *"....the best teacher for a child with ADHD is the one having a child with ADHD at home."*

- **School success**

The importance of success at school or the fact that children with behavioural problems experience failure at school was considered by 8 out of 14 informants. The most typical statement was as follows: *"...very few children with a behavioural disorder experience success at school. Teachers forget to appreciate, praise and encourage..."* (informant No. 8) or *"it depends on how this child is accepted by a group when he/she has not experienced success at school in the long term or does something for what he/she is appreciated by the group regardless of its negative nature"* (informant No. 9). The statement of informant No. 1 was also fitting: *"The risk of failure at school in children with ADHD is associated with the extent*

to which the grade corresponds to the child's abilities and to which it evaluates that the child is naughty at school, that is, manifests behavioural problems."

- **Problem, reflexion of the situation by the child himself/herself and his/her inner world**

These topics were addressed by 10 out of the 14 informants. We joined the problem, the reflexion of a situation by the child himself/herself and the conception of his/her inner world into one group since they overlapped in the respondents' answers. The following statement can be considered as typical: *"The child is not able to admit that he/she has a problem..."* (informant No. 5). Other informants (No. 13, 5 and 4) focused, in this context, on the child's motivation, which was represented by the following most frequently expressed statement: *".... these children's motivation is purposeful..."* Conversely, informant No. 12 dealt with these children's inner world: *"The children's inner world is not worked with, it is generally known. We name the problem on the outside, but nobody wants to know more. The workers have no capacity. The investments they bring are definitely not worth it."*

3. How can a child with behavioural problems be recognized?

In the third sphere of questions, we looked for answers to questions relating to the evaluation and diagnosis of children with behavioural problems, what needed to be accentuated in these children in the diagnostic process and, conversely, what was not essential, or, possibly, which diagnostic tools were considered as time-proven by the respondents and were used in their work.

This sphere received the fewest answers (11 out of 14 informants). The most striking were the contradictory statements. Four out of the eleven respondents who provided their opinion on the given topic stated that they did not need the diagnosis and diagnostic tools (in particular, the examination of the structure of intellectual abilities) and did not consider them as important. For example, informant No. 9: *"...I do not need any intellectual abilities, it is like the performance of an engine..."* Other informants (No. 3 and 4) stated that they did not diagnose children, but were only sending them for examination if needed. Conversely, informants No. 2, 6, 7 and 11 emphasized its irreplaceable role and accentuated, in particular, the projective testing methods and the emphasis on discovering the personality potential and social relationships of children with behavioural problems. Informant No. 6 stated as follows: *"For diagnosis, I must have a structure of intellectual abilities in order to exclude, for example, a slight mental retardation..."*

An interesting opinion was expressed by informant No. 11: *"The diagnosis in children with behavioural problems does not work under greenhouse conditions, for example, of a school consulting facility. The child cannot be encouraged in his/her context. It can only be recognized during interaction with other children, that is, in a group or a class."*

Informant No. 8 stated as follows: *"...to determine the diagnosis as a behavioural disorder, it is essential to consider his/her family environment."*

Three informants (out of 11) would welcome the development and extension of the approaches of dynamic diagnosis that is not spread in the Czech Republic at all in the sphere of children with behavioural problems.

4. How to work with these children?

The last sphere of questions focused on recommending how to work with these children, whether there were any approaches, methods and forms of work that could be generalized and recommended as examples of good practise. The answers were considerably manifold. However, we can state that the most frequent partial agreements were reached in this sphere.

- **Relationship, respect**

Eleven informants (out of the 14 informants) stated that when working with children with behavioural problems, it was the most substantial for the child to feel that the adult has a

relationship with, and respect for, him/her. *"A relationship is content - the client should meet his/her therapist - and, conversely, the technique is a form – I must find what is suitable..."* (informant No. 14)*, "...it works for them to believe me; relationship, trust, risk of worker's job – exhaustion..."* (informant No. 12)

• **Rules, structure, thoroughness, justice**

Eight of the 14 informants stated that the set rules, the structure, thoroughness and justice were important in relation to these children. For example, informant No. 6 stated as follows: *"Thoroughness is the alpha and the omega, even when the requirements are reasonable..."*

• **Institutions' cooperation**

The necessity of cooperation of all of the involved institutions, that is, the family, the school, social curators, psychiatrists, was accentuated by 6 out of the 14 informants.

• **Workers' lifelong education; professional erudition, experience**

Six out of the 14 informants accentuated the need for workers' further education in the form of therapeutic training, courses, training of social and communication skills, etc.

However, the informants did not reach an agreement on any approach that could be generally recommended. For this reason, the recommended approaches and methods included, for example, the Feuerstein's method of Instrumental Enrichment, weekend trips for children, individual, group and family therapy, parent groups, or experience-based education. Two informants agreed on the method of filming the interactions, but each of them applied it differently. *"I film them without a camera. They describe how it is to steal, how they enjoy it and how they could enjoy something else..."* (informant No. 9). Conversely, informant No. 7 stated as follows: *"...working with a camera is interesting. The children like seeing themselves. They watch the record together and evaluate it."*

Resume

• Most of the informants (12 out of 14) identify with the term behavioural disorder.

• Seven (out of the total number of 14 informants) associated the demonstration of behavioural disorder in children with impaired social relations, failure at school and emotional disorders.

• 10 out of the 14 informants perceived, as interesting food for thought, the demonstration of behavioural disorders in children as contemplating on who actually has the problem (the child or the family members, school staff, etc.).

• All 14 informants agreed on the fact that teachers have significant problems with children with behavioural disorder and they are not able to completely solve these problems.

• 10 out of the 14 informants said that a child with a behavioural problem is not able to perceive his/her behaviour as a problem, but that the problem is with everybody else (parents, teachers, etc.).

• Specialized pedagogues, and social workers, as opposed to psychologists, do not use any standardized or non-standardized diagnostic tools.

• 11 out of the total number of 14 informants said that the most important factor in working with children with behavioural disorders is the relation of the adult with the child and respect for the child.

• 8 out of the 14 informants consider, as the most important factor for working with such children, rules, consistency and fair approach of the adults in their relation with these children.

Discussion

The concept of behavioural problems (so-called behavioural disorders) in children in the Czech Republic is influenced by the highly disjointed system among the resorts, large

number of participants, often unclear rules and financial resources, with accompanying range of stereotypes, and established processes and prejudices. This system often becomes the subject of criticism from the professional and non-professional public on national as well as international levels. The system is currently undergoing transformation and it is clear that the reform will be a long-term process, the expected results of which may only become apparent after several years. This situation is unintentionally reflected in the conducted survey. It is interesting to analyse the individual statements, which actually reflect the generally known facts, e.g. a dysfunctional family environment, failure at school, and the personality of the teacher and its influence on the child's behaviour; however, on the other hand, they also offer completely original answers and sources of inspiration for working with the given target group. There is a range of stereotypes regarding children with behavioural problems both among the professional and the non-professional public. Some of these stereotypes were confirmed by the carried-out survey, others were disproved. Many statements are quite polemical and arguable; nevertheless, they are undoubtedly inspirational for continuing work with such children and for future research in this area.

It was very difficult for the informants to clearly define their answers. The informants also referred to the significant distinction in the children's manifestations, family background, personality, and motivation towards change. Their answers reflected their life and work experience and, in particular, the job they do. Only the last sphere of questions traced certain elements of an agreement when relationships and mutual respect were accentuated by the overwhelming majority of the respondents. These concepts overlap and accompany answers of all respondents who, although they have had many years' experience in working with the given target group, are still looking for new directions, approaches and forms of working with these children. Many statements were original, but also full of contradictions and polemics. However, all of them lead us to considering more deeply not only children with behavioural problems but also all conceptual categories that appeared in this context.

With respect to children with problematic behaviours, some informants accentuated their disorderly family situation and complicated family relationships, while others stressed their school teacher's authority and personality, their low school achievement, etc. Such variety of responses had not been anticipated. It would be extremely difficult to determine preferences of each individual informant and their statements can be interpreted from a number of different angles.

It is necessary to point out that the research was also the part of, and inspiration for, more extensive research devoted to children with behavioural problems.

Conclusions

We set research questions to which the spheres and questions in the implemented interviews corresponded.

The first sphere of questions focused on specifying the most striking manifestations of a child's problematic behaviour with impact on his/her social relationships and whether the respondents reached any strong disagreement on something. The most frequently stated disorders were attention deficits, hyperactivity, impulsiveness and aggression.

In the next question aimed at the impact of problematic behaviour on the child's schoolwork and success, most informants (8 out of 14) agreed that the stated disorders had strong influence on schoolwork and that the children with behavioural problems experienced success at school only rarely.

The last set of questions focused on generalizing the professionals' experience in applying the methods, programmes, approaches and techniques as examples of good practise and the possibilities of stating these examples as recommended approaches for working with children with behavioural problems resulted in the fact that the respondents did not agree to

any method that could be so generalized and recommended. Nevertheless, they agreed that relationship and mutual respect constituted the cornerstone for working with these children, which is not insignificant at all.

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SPECIFIC APPROACH TO CHILDREN WITH BEHAVIOURAL PROBLEMS

Summary

Miluše Hutyrová
Palacky University Olomouc, Czech Republic

This is a qualitative research study focused on the issue of children with behavioural problems in the Czech Republic. It represents a collection of complete opinions of experts from various professions on the manifestations, causes and possibilities of diagnostic and, in particular, intervention methods in these children. The goal of the study was to define the time-proven approaches, methods and forms of work that could be generalized and recommended as examples of good practise for working with the given target group under the conditions of schools and school consulting facilities.

The paper was to collect the views, opinions and attitudes of experts from various professions (special educators, ethopedists, consulting, clinical and school psychologists, social workers and curators, psychiatrists, psychotherapists) with respect to the manifestations, causes and the possibilities of diagnosis and intervention in children with behavioural problems.The research used the qualitative research methods. We believe that they satisfy the requirement for methods of collecting data as being open, and place emphasis on the subjective importance and interpretation. The structure of the interview stemmed from the concept of spheres ensuing from the research questions, and four spheres were set.

For the informants to clearly define their answers. The informants also referred to the significant distinction in the children's manifestations, family background, personality, and motivation towards change. Their answers reflected their life and work experience and, in particular, the job they do. Only the last sphere of questions traced certain elements of an agreement when relationships and mutual respect were accentuated by the overwhelming majority of the respondents. These concepts overlap and accompany answers of all informants who, although they have had many years' experience in working with the given target group, are still looking for new directions, approaches and forms of working with these children.

ABOUT THE AUTHORS

Rashida Banerjee

Academic degree, title and affiliation	Ph.D., Associate Professor in the School of Special Education at University of Northern Colorado, USA.
Area of research interests	Workforce development, effective community, family, and professional partnerships and international support systems for persons with disability
E-mail address	rashida.banerjee@unco.edu

Elena Goncharova

Academic degree, title and affiliation	PhD (Psychology), Doctor of Sciences (Psychology), Principal scientist, Institute of Special Education, Russian Academy of Education, Moscow, Russia.
Area of research interests	Disorders of reading of children, psychology of education of children with vision and hearing impairments, computer aided technologies in teaching children with special needs
E-mail address	elegon@mail.ru

Ilona Dobrovolskytė

Academic degree, title and affiliation	Master's Degree in Applied Physical Activity (Social Science, Educology), Assistant of the Department of Health Studies of the Faculty of Social Welfare and Disability Studies, Šiauliai University, Lithuania
Area of research interests	Development progress of infants with motor delays by using corrective education and vocational rehabilitation
E-mail address	i.dobrovolskyte@gmail.com

Miluše Hutyrová

Academic degree, title and affiliation	PhD (Education) Associate Professor of Institute of Special Education, Faculty of Education, Palacky University Olomouc, Czech Republic
Area of research interests	People with disability, inclusion, art therapy methods and technologies
E-mail address	milahutyrova@seznam.cz

Margarita Jureviciene

Academic degree, title and affiliation	PhD (Social Science, Educology), Lecturer of Special Education Department, Siauliai University, Lithuania.
Area of research interests	Children's mental development disorders; social skills training for children with intellectual disabilities; special teacher training
E-mail address	margarita.jureviciene@gmail.com

Irena Kaffemaniene

Academic degree, title and affiliation	PhD (Social Science, Educology), Associate Professor of Special Education Department, Siauliai University, Lithuania.
Area of research interests	Disability studies; inclusive education; special teacher training; quality of higher education
E-mail address	irena.kaffemaniene@su.lt

Aivars Kaupuzs

Academic degree, title and affiliation	PhD , Researcher of Personality Socialization Research Institute of Rezekne Higher Education Institution, Latvia
Area of research interests	Physical rehabilitation, social rehabilitation
E-mail address	aivars.kaupuzs@inbox.lv

Albina Kepalaite

Academic degree, title and affiliation	PhD (Social Science, Psychology), Associate Professor of General psychology Department, Vytautas Magnus University, Kaunas, Lithuania.
Area of research interests	Teachers' personality
E-mailaddress	a.kepalaite@smf.vdu.lt

Velta Lubkina

Academic degree, title and affiliation	PhD, Professor, Director of Personality Socialization Research Institute of Rezekne Higher Education Institution, Latvia
Area of research interests	Social rehabilitation, special pedagogy
E-mail address	velta@ru.lv

Daiva Mockevičienė

Academic degree, title and affiliation	PhD (Social Science, Educology), Associate Professor of the Department of Health Studies of the Faculty of Social Welfare and Disability Studies, Šiauliai University, Lithuania
Area of research interests	Development progress of infants with motor delays by using corrective education and vocational rehabilitation
E-mail address	daiva.mockeviciene@su.lt

Neringa Povilaitienė

Academic degree, title and affiliation	PhD student, Assistant of Department of Social Education and Psychology, Faculty of Social Welfare and Disability Studies, Šiauliai University, Lithuania
Area of research interests	Gender studies, psychosocial development of children with mild mental disabilities
E-mail address	neringa.p@spf.su.lt

Liuda Radzevičienė

Academic degree, title and affiliation	PhD of Social Science (Education), Professor of the Department of Medical Backgrounds, Faculty of Social Welfare and Disability Studies, Šiauliai University, Lithuania
Area of research interests	Psychosocial health of socially disadvantaged people, socialization of people with disabilities through the process of rehabilitation.
E-mail address	raliuda@gmail.com

Alena Říhová

Academic degree, title and affiliation	PhD (Special Education) Assistant lecturer of Institute of Special Education, Faculty of Education, Palacky University Olomouc, Czech Republic
Area of research interests	Autistic spectrum disorders, communication disorders, speech and language therapy intervention, interdisciplinary, early intervention and special needs education diagnostics, alternative and augmentative communication
E-mail address	alena.rihova@upol.cz, alca.rihova@email.cz

Lorita Rizakova

Academic degree, title and affiliation	Researcher, Medical Rehabilitator of Personality Socialization Research Institute of Rezekne Higher Education Institution, Latvia
Area of research interests	Physical rehabilitation, medical rehabilitation
E-mail address	materhorn@inbox.lv

Harvey A. Rude

Academic degree, title and affiliation	Ed. D., Professor and Director of the School of Special Education at the University of Northern Colorado, USA; Director of the Bresnahan-Halstead Center
Area of research interests	Leadership effectiveness, systems of accountability, American Indian education, and the change process
E-mail address	Harvey.Rude@unco.edu

Melody Tankersley

Academic degree, title and affiliation	PhD (Social Science, Education), Professor of Special Education Department, Associate Provost for Academic Affairs of Kent State University (USA)
Area of research interests	Evidence-based practices, positive behavioral programming, the prevention of emotional and behavioral disorders, parent interventions.
E-mail address	mtankers@kent.edu

Svetlana Usca

Academic degree, title and affiliation	PhD (Social Science), Researcher of Personality Socialization Research Institute of Rezekne Higher Education Institution, Latvia
Area of research interests	Social rehabilitation, special pedagogy
E-mail address	svetlanausca@inbox.lv

Kateřina Vitásková

Academic degree, title and affiliation	Ph.D. (Special Education), Associate Professor of Institute of Special Education Studies, Faculty of Education, Palacky University in Olomouc, Czech Republic
Area of research interests	Special needs education, speech and language therapy, communication disorders, specific learning difficulties, autism spectrum disorders, hearing impairment
E-mail address	katerina.vitaskova@upol.cz

Tetiana Nikolaevna Yablonska

Academic degree, title and affiliation	Ph.D., Senior Research Fellow of the laboratory of personal psychology, Kostyuk Institute of Psychology of the National Academy of Pedagogical Sciences
Area of research interests	Personal psychology, development of the child in the family
E-mail address	t_yablonska@ukr.net

Svitlana Dmytrivna Yakovleva

Academic degree, title and affiliation	PhD (Medical Sciences), Associate Professor, Head of Department of Correctional Education, Kherson State University, Ukraine
Area of research interests	Psychophysiology of persons with mental and physical disabilities
E-mail address	yakovleva_ya@mail.ru

Renata Žukauskaitė

Academic degree, title and affiliation	Master's Degree in Applied Physical Activity (Social Science, Educology), Assistant of the Department of Health Studies of the Faculty of Social Welfare and Disability Studies, Šiauliai University, Lithuania
Area of research interests	Assessment of person's physical abilities.
E-mail address	zukauskaite.r@gmail.com

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- socialwelfare@su.lt
- socialwelfareua@gmail.com

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Contacts

Address in Lithuania:
Šiauliai University
Faculty of Social Welfare and Disability Studies,
P.Višinskio 25,
Šiauliai, LT-76351,
Lithuania

Address in Ukraine:
Open International University of Human Development "Ukraine"
Social Technologies Institute
23 Lvivska str. office 110-1, Kyiv, 03115,
Ukraine

Contact person:
Šapelytė Odeta
E-mail address: socialwelfare@su.lt
Website: http://www.socialwelfare.su.lt/
Tel: +370 41 595754

Contact person:
Kozlikovska Nadiia
E-mail address: socialwelfareUA@gmail.com
Website: http://en.vmurol.com.ua/socialwelfare
Tel: +380 67 4475188

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