jep

Journal of Exceptional People

2016 – Volume 1; Number 8

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

Journal of Exceptional People
Volume 1, Number 8, 2016, published in May 1, 2016

Scientifics Board
- Mary Benedetti, University of Cincinnati, USA
- Zsolt Cséfalvay, Univerzita Komenského, Bratislava, Slovakia
- Dariusz Dziuba, Uniwersytet Ślasky, Katowice, Poland
- Antonio Miňan Espigares, Facultad de Ciencias de la Educatión, Granada, Spain
- Vicky Karkou, Edge Hill University, UK
- Valéria Kerekes, Általános Gyógypedagógiai Tanszék, Budapest, Hungary
- Katarína Majzlanová, Univerzita Komenského, Bratislava, Slovakia
- Festus E. Obiakor, Valdosta State University, USA
- Karel Pančocha, Masarykova univerzita, Brno, Czech Republic
- Sharon Raver – Lampman, Old Dominion University, Norfolk, USA
- Endre Szkárosi, Eötvös Loránd University, Budapest, Hungary
- Laima Toméniené, Šiauliai University, Lithuania
- Pavel Vacek, Univerzita Hradec Králové, Czech Republic
- Igor Viktorovič Vachkov, Moscow State University of Psychology and Education, Rassija
- Milan Valenta, Univerzita Palackého, Olomouc, Czech Republic
- Kateřina Vitásková, Univerzita Palackého, Olomouc, Czech Republic
- Peng Yan, Sichuan Normal University, China

Editor in Chief Libuše Ludíková
Executive Editors Pavel Svoboda, Jan Chrastina
Responsible Editor Jana Kreiselová

Editorial Board
Oldřich Müller, Lucia Pastieriková, Martin Dominik Polínek, Petra Potměšilová, Michal Růžička, Veronika Růžičková, Vojtech Regec, Kateřina Kroupová, Jiří Langer, Jiří Kantor, Zdeňka Kozáková

Language Editors Jana Magdoňová, Edita Satinská

Cover Design Jiří Jurečka
Technic Editor Helena Hladišová

Editorial Office
PdF UP, Žižkovo náměstí 5, Olomouc, 770 00, Czech Republic

Publisher
Published and printed by Palacký University, Olomouc
Křížkovského 8, 771 47 Olomouc

Journal Website: http://jep.upol.cz/

ISSN 1805-4978 (Print)
ISSN 1805-4986 (Online)
Reg. č. MK ČR E 20769

Journal of Exceptional People
An International Journal for Education and Special Studies

Editor Pavel Svoboda
Volume 2
Number 7
2015

Journal of Exceptional People is indexed in:
- List of non-impact peer-reviewed journals (Council for Research, Development and Innovation, Czech Republic)
- ERIH Plus (The European Reference Index for the Humanities and the Social Sciences)
- Ulrich's Periodicals Directory (UlrichsWeb)
- Index Copernicus International

Content

ARTICLES

BOOK REVIEWS

Introduction

Dear readers,
Thank you for reading the 8th issue of the Journal of Exceptional People (JEP), which we have published regularly since 2012. Our journal is published twice a year in an electronic and a printed form. It can be viewed on the website http://jep.upol.cz/, the printed version is not for sale, but you can get it at some libraries and at conferences organized by the Department of Special Educational Studies of Palacky University Olomouc.

We are pleased that the interest in our magazine continues to grow. Our work was evaluated and the JEP was added into an international databases : List of non-impact peer reviewed journal, ERIH Plus, Ulrich's Periodicals Directory and Index Copernicus International. The magazine JEP was also approved and is now indexed in Bibliographia Medica Čechoslovaca (BMC) of the National Medical Library of the Czech Republic.

We try to insert into each number of JEP Czech articles and contributions by foreign authors, we also expanded the scientific and editorial board of the journal of other domestic and foreign experts.

The 8th issue of Journal of Exceptional People contains seven articles and two book reviews. Nigerian author Francesca Uko in her overview essay acquainted us with the most suitable approaches and tools for the care of a person with visual impairments . Czech author Zdenka Kozáková in her contribution deals with the quality of life of people who care for disabled individuals and Jan Chrastina describes the importance of the components of a clinical question applied in the preparatory and conceptual stage of the special education research.

Problems of visual perception are also engaged in the post of Spanish authors Helena Chacon-Lopez and M. Dolores López-Justicia.

The Slovak experience relating the Play Therapy used to educate is introduced to us by Petra Mitašíková. The following scientific paper by Nigerian author Orim, Samuel Orim concerns the issue of barriers to employment for person with disabilities as correlate of economic contribution to national development in Nigeria.

The final scientific study of Kateřina Vitásková concerns the expectations and attitudes to the diagnostics and intervention for people with symptomatic speech disorders, with an emphasis on the autism spectrum disorders.

The professional part of the magazine is finished with two book reviews of Chinese and Czech authors. Next few pages are devoted to technical and ethical problems of writing the contributions. The contributors can use templates for writing articles which are available on our website (http://jep.upol.cz/).

We wish you a nice reading

Pavel Svoboda and Jan Chrastina – executive editors

Appropriate mobility training a tool for proper adjustment for persons with visual impairments

(overview essay)

Uko, Francesca Uche-Ezekiel

Abstract: *This paper looks into the relevance of mobility training in the adjustment process of persons with visual impairment. It concentrates on a brief history of how mobility started as a profession, discussing the skills that are learnt in the field of mobility training. It lists some electronic aids/devices used in mobility training which are stated based on the technology either low technology or high technology. Low technology aids/devices include: white canes, white walking sticks, guide canes, long canes etc., while the high technology are laser canes, wheel chairs, pathfinder, sensory 6, the sonic pathfinder etc. Finally, the paper concludes that appropriate mobility is a tool for proper adjustment of people with visual impairment regardless of other disabilities, age and onset of impairment in life. Mobility, therefore, is a lifelong learning process.*

Keywords: *Mobility, mobility training and specialist, person with visual impairment*

1 Introduction

Movement is a building block for learning. As a child grows, he explores his world and as he has physical contact with it, learning takes place. Children with visual impairment typically need encouragement to explore their surroundings due to the lack of visual stimulation (Martinez & Moss, 1998). People with visual impairment see world as a unpredictable place, or not motivating due to the handicapping condition that limit their normal life functions. As we all know, vision is necessary for movement, flexibility is also required. Visual impairment is categorized into low vision and total blindness. According to Nwachukwu (2008), most students who are blind have light perception but a small number have absolutely no vision. While students having low vision can learn from their residual vision and other senses, those with no vision cannot. The impairment may occur before birth, during birth or later in life (before or after acquiring the ability to recall visual memory). This impairment affects the individuals in so many ways but the effect varies depending on when it occurred. Lowenfeld (1974) suggested that blindness imposes three major restrictions on the individuals: their range and variety of experiences, their mobility, and their ability to control the environment and themselves in relation to it. All these restrictions limit visually impaired persons adjustment physically, socially, emotionally and otherwise. In the pursuit of helping people with visual impairment appropriate mobility training need to be in place.

2 Mobility

Mobility refers to the ability to move safely, efficiently, and effectively from one place to another. This implies being able to walk without tripping or falling, street crossing, and use of public transport (Saverburger, 2013). Mobility is an important lifelong learning process. Blindness affects the formation and development of concepts. A child with vision learns a lot through observation, imitation and participation in activities at home and at school. He learns continuously as he interacts with people in the society. He has deep understanding and clarity of concept as he interacts continuously in different settings. Visually impaired individuals have restricted opportunities; they are overprotected by their parents, teachers and friends due to the fear for their safety and wrong perception of their ability. Because of their impairment they are not allowed to participate in household chores, run errands or interact in many other ways with the community. The restriction of mobility, limits their range and variety of experiences and opportunities. Ayoku (2006) said that mobility confers the ability to explore one's environment, opportunity to interact with people, objects and events. This in turn aids proper adjustment in the society. It aids concept formation and development, widens social interaction and also encourages independence.

2.1 Brief History of Mobility

The profession of mobility began to develop during, and immediately after, World War II when soldiers who had been blinded in battle were sent to recuperate at Valley Forge army general hospital. In order to serve better the large number of blind soldiers who required special training and services, the military recruited Richard E. Hoover, an army sergeant, who was assigned to the center for the treatment of blinded soldiers at Valley Forge Army Hospital in 1944. In the same year, Russell Williams, who was blinded by enemy action in France, received medical rehabilitation at the Valley Forge Army Hospital, and in 1947 C. Warren Bledsoe joined the hospital. Both Hoover and Bledsoe had previously worked at the Maryland school for the blind. These three men made significant contributions to the development of a new profession orientation and mobility.

The blinded soldiers were highly motivated to be successful and Richard Hoover believed that the traditional strategies taught and used to travel independently were inadequate. In response, he developed a technique for using a cane that is lightweight and longer than support canes. This technique and cane revolutionized independent travel for blind people and are still used today.

2.3 Mobility Training for the Visually Impaired

Mobility training is very important and essential for people with visual impairment. Mobility training involves all activities and experiences directed towards making the individuals with visual impairment functional and able to acquire skills necessary for independent travel, as well as how to travel safely both in indoor and outdoor environment. Mobility training is usually given in a rehabilitation centre as part of the adjustment program for individuals with visual impairment. It can either be on a one on one basis or in groups. This program includes basic orientation and mobility skills. Mobility instruction is demonstrated by certified personnel called mobility specialist. Mobility training helps to develop skills required to move around safely in the environment. Mobility training may involve advising a person on how to use their residual vision to move around safely or may involve an in-depth training on how to use a mobility aid such as a white cane, a guide dog, electronic aids etc. It is also based on guided earning and structured-discovery training. What follows are the skills of mobility that a certified mobility specialist must demonstrate.

- **Sensory development:** It involves helping one to know where one is and where one wants to go using one's senses in combination with self protective techniques and human guide technique to move safely through the environment.
- Solicit and/or declinine assistance.
- Finding destinations with strategies that include following directions and using landmarks and compass directions.
- Technique for crossing streets, such as analyzing and identifying intersections and traffic patterns.
- Problem-solving skills to determine what to do if one is disoriented or lost or needs to change route.
- Using public transport and transit systems.

There are two distinctive instructional methods:
1. Guided Learning: Is organized in a rigid sequence of instruction which include sighted guide, dog guide, use of cane etc.
2. Routes travel/structured – discovery training: involves discovery, learning good spatial and motor skills.

2.4 Mobility Specialist

Mobility is a profession specific to blindness and low vision. Mobility training is taken charge of by mobility specialist; the specialist provides instructions that can help the visually impaired to develop or relearn the skills and concepts they need to travel safely and independently within their homes and communities. Mobility specialist provides services across the life span; teaching infants, children in pre-school and school programmes as well as adults in a variety of community-based rehabilitation settings. A resource or itinerant teacher according to Ayoku (2006) specializing in the education of the visually impaired is also qualified to train the pupils in orientation and basic mobility skills.

2.5 Electronic Aids for Mobility

There are a lot of mobility devices or aids that individuals with visual impairment use. Most are considered low technology because they are very simple aids for example, a cane. Most people with visual impairment use low technology devices/aids for two reasons:
1. They are relatively not expensive to purchase and maintain.
2. One must know how to use them before other basic devices (Martinez & Moss 1998).

White canes and walking sticks: there are three different types of white canes and also a white walking stick available, but only two of the white canes are classified as mobility aids.
1. A white walking stick provides physical support for a person and indicates that the individual has sight loss. It is not a mobility aid.
2. A symbol cane is used to indicate that a person holding it has impaired vision and may need assistance. It is not a mobility aid and does not provide physical support.
3. Long cane is a mobility device which is used by sweeping the cane in an arc from side to side along the ground beyond the width of their body. This technique

locates potential hazards and changes in the texture and level on the ground. Use of long cane requires training.

4. Guide cane is a mobility aid with more limited use than a long cane and, therefore requires less training. It can be used in a diagonal position across the lower part of the body for protection or using a scanning technique to detect curves and steps. It does not provide physical support.

High Technology Devices Include:

1) **The sonic pathfinder:** this is a head mounted ultrasonic device designed for outdoor use in conjunction with a long cane, dog guide or residual vision. It gives the user advance warning of objects which are located within the travel path.
2) **Sensory 6:** this is a device that detects objects that are farther away than a long cane, and users hear tones that indicate the distance between the objects. As objects are approached the tones become higher pitched.
3) **Laser cane:** this device operates with three lasers that emit invisible beams of light from the cane. The beams detect drop offs and obstacles at different heights and distances.
4) **Wheel chair pathfinder:** this is a set of small rectangular boxes mounted to the front of a wheel chair. It detects obstacles too as one moves with the wheel chair.

Mobility should start at an early age with basic body awareness and movement. Mobility aids/devices help individuals with visual impairment to travel safely without stress.

3 Relevance of Appropriate Mobility Training to Adjustment Process of Persons with Visual Impairments

Mobility according to Slideshare (2010) is defined as physical movement and the negotiation of obstacles and hazards. It is the aim of obtaining freedom of movement without coming to any harm, safety in travelling as well as minimizing the level of stress placed upon a visually impaired person. Appropriate mobility training helps a lot in the adjustments process of persons with visual impairments. It helps in various ways regardless of the handicapping condition or presence of other disabilities. Mobility training brings about physical, social and emotional adjustment and transition into adulthood. Mobility training is relevant in diverse ways.

1. Appropriate mobility training will create ability to move with confidence to maximize independence regardless of age or inexistence of other disabilities. Persons with visual impairments will be able to develop and master skills and concepts

necessary for safe and efficient moving within their world without depending on anybody around.

2. Mobility training teaches the brain in such a way that purposeful movement will be initiated and comes or occurs naturally for persons with visual impairment. This means that they will move purposefully without anybody forcing them to move or travel.
3. Mobility skills will enable the visually impaired to explore and interact with the world, including the home, school and community. It will help them to understand their environment.
4. When this understanding occurs, they will begin to adjust properly by feeling safe; safety creates confidence and a sense of well being in them.
5. Mobility instruction provides real experiences essential to all children and adults who are visually impaired. The skills learned reduce isolation by giving the visually impaired a common ground for interacting with family, friends and significant others. Mobility training helps them to adapt and prepare for future/gainful employment which will increase their life output and potentials making them live a normal and meaningful life in motivating environment which makes them independent thereby increasing their economic status.
6. It gives the opportunity to evaluate and assess their abilities in unfamiliar environment by using their limited vision in the neighborhood or community.
7. Mobility training also helps parents to remove the fear of their child getting hurt as he moves around or towards voices.

4 Recommendation

1. Awareness should be made to the general public about the relevance of mobility training in the adjustment process of persons with visual impairment. This will change the negative attitude of the public and government towards blindness. Awareness of the relevance of mobility training in the adjustment process of persons with visual impairment will prepare the minds of the public that even with visual impairment these persons are still capable of making it in life independently.
2. The government should give their support to persons with visual impairment through funding and provision of adequate facilities and equipment needed in rehabilitation centers for appropriate mobility training. More centres should be put in place to accommodate the enrolment of persons with visual impairment in the community.
3. Advocates should be about the relevance of mobility training to NGOs, public and private organizations for them to have interest in supporting the program by

funding it because most of the visually impaired persons may not be financially capable to enroll on the program/training.

4. Parents, teachers and significant others should remove their fears of what visual impairment can cause and rather capitalize on the strengths of these persons by supporting them through mobility training programs so that they can adjust properly in the society.
5. Counsellors and specialists should counsel parents to stop confining their visually impaired children at home but to allow them to have appropriate mobility training which will in turn aids their proper adjustment in the society making them achieve their set goals in life.

5 Conclusion

Mobility training offers a lot to persons with visual impairment by enabling them to perform daily activities like going to a common place so that they can interact with others and develop interpersonal relations with friends, teachers and significant others in the society and for them to make purposeful movement. Mobility as we can see in this paper aids proper adjustment of persons with visual impairment psychologically, emotionally and psychosocially. It broadens their awareness of the environment which in turn, results in increased motivation, independence and safety. Appropriate mobility is therefore, a tool for proper adjustment of persons with visual impairment for both adults and the young ones.

References

[1] AYOKU, F. A. (2006). The visually impaired in the regular classroom. In T. C. Obani (Ed.), *Teaching pupils with special educational needs in the regular* UBE Classroom. Ibadan: Book Builders Edition Africa.

[2] LOWENFELD, B. (1974). *Visually handicapped child in school.* Charles C. Thomas, Springfield, Illinois.

[3] MACKENSTADT, D. (N. D.). *A good orientation and mobility programme in public schools.* Retrieved June 22, 2014, from: nfb.org/../fr270210.htm.

[4] MARTINEZ, C. & Moss, K. (1998). *Orientation and mobility training: the way to go.* Retrieved June 21, 2014, from: http://www.tsbvi.edu/.../way.togo.htm.

[5] NWACHUKWU, K. E. (2008). Materials and issues in the method of educating the visually impaired persons. *The journal of Advocacy and Rehabilitation in Special Education* (JARSE), 6 (1), 15–21.

[6] SAVERBURGER, D. C. (2003). *An introduction to orientation and mobility skills*. Retrieved: June 21, 2014, From: visionaware.org.

[7] SCOUT, P. (N. D). *Orientation and Mobility for people who are blind.* Retrieved June 21, 2014 from: Perkins Library http://www.perkins.org/resources/scout/or;...

[8] Slideshare (2010). Importance of Orientation and mobility training. Retrieved: June 25, 2014, from: http://www.slideshare.net/vpoint 7/iimportance.

[9] Texas school for the blind and visually impaired and the professional preparation advisory (2013). Benefits of orientation and mobility. K. C. Dignan (Ed.), retrieved: June 25, 2014. From: Texas School for the blind library.

[10] WELSH, R. L. & BLASH, B. B. (1999). *Foundations of orientation and mobility.* New York American foundation for the blind.

(reviewed twice)

Uko, Francesca Uche-Ezekiel
Ministry of Education, Special Education Centre
Uyo
Akwa Ibom State
Nigeria
e-mail: easyfavo@gmail.com

Subjective attitudes of the parents of a child with disability to selected aspects of their quality of life

(scientific paper)

Zdeňka Kozáková

"The paper is dedicated to the following project: 'Perception of subjective impact of health disability/presence of chronic disease and concept of health awareness and literacy' (IGA_PdF_2015_003)".

Abstract: *The quality of life of families caring for a disabled individual is a highly topical issue, which deserves due attention. In order to provide these families with quality special education care and support, first it is desirable to identify their needs in a comprehensive manner. Firstly, the paper defines the theoretical background and terminology of the issue. Then the paper presents the results of a research study, whose objective was to identify the subjective attitudes of the parents of a disabled child to selected aspects of the quality of their life. The research was carried out by means of the questionnaire method. The research involved 37 families of children with disability. The results of the research points out that a family caring for a child with disability is burdened both financially and physically, which influences the quality of life of all its members. The answers of the respondents also indicate a degree of dissatisfaction with the help of the state provided to families with a disabled child. Whether it be material support or a greater understanding on the part of the state and state institutions. The results also imply that caring for a child with disability has an effect on the partnership of the parents and their leisure time, it also brings intense feelings of fatigue. The research also indicates that a crucial role is played whether a family caring for a child with disability is assisted by another person or institution, who take over some responsibilities. The paper emphasises several areas that should be addressed with due attention in the future, and outlines possible solutions. The final part of the paper summarizes and compares the results of the present research with the results of other professionals. This issue is addressed by professionals both in the Czech Republic and abroad.*

Key words: *family, disability, quality of life, support, care, questionnaire*

1 Introduction

The quality of life of families caring for a disabled individual is a highly topical issue. A positive finding is that this issue is addressed by an increasing number of professionals both in the Czech Republic and abroad and that numerous research studies are performed in this area. See for example Michalík, 2010; Michalík, Valenta in Titzl, 2008; Kozáková, 2014, etc. The research presented in this paper builds on a research study carried out by means of a standardized questionnaire SEIQoL, and a research study using a questionnaire method to identify stressful and resilient factors and tendencies in persons caring for an individual with health disability (Kozáková, 2014).

Firstly the paper defines the basic terminology and theoretical background relating to the issue, then the paper presents a summary of selected results of the research study, the objective of which was to identify subjective attitudes of the parents of children with disability to selected aspects of the quality of their life.

2 Theoretical background and definition of terminology

The birth of a child with disability, or the discovery of a child's disability in the course of life is a significant life event and often represents a "test" for the whole family. What often happens is that the family is unable to withstand the burden and falls apart as a result of the imposed stress. It very much depends on how the family accepts the situation. Whether such situation is accepted as a "disaster" and the family remains isolated in their pain, or as a life challenge, when the family learns to accept the child with the disability, to be active, not to lock away the family or the child from the surrounding world, but with a desire to prepare the child for life. Each family member copes with a child's disability in an individual way. A key aspect is the decision of the parents to handle the situation, adopt the role of "the parents of a child with disability" and to create the best possible conditions for the life of the child and the whole family. (Vančura, 2007) Only after the parents accept the new situation and deal with it, they can do much good for the child and for themselves. Much precious and unique. (Matějček, 2005)

A significant role is also played by experts, financial and social support of families with disabled children, support provided by the state, organisations, facilities, and last but not least public education activities in the society.

This also presents a specific situation for **the sibling in the family**. A danger on the part of the parents might be focusing their parental care on one of the children, i.e. they primarily care for the child with disability and the sibling is expected to show more mature behaviour than corresponds to his/her level of development. Or, conversely, they might focus their attention on the child without disability, which may serve as a means of compensation and is one of the possible defence mechanisms. Both approaches might place inadequate demands on the sibling, who might not be able to handle them. (Kozáková, 2005)

Parents caring for a child with disability are endangered by **the burnout syndrome**. More than anybody else, parents need to take a rest from mental overload, have an opportunity to do something else, think about something else and gain new strength. A preventive function might be fulfilled by meeting other parents of children with disability and transfer of experience, advice, worries and joys. (Kozáková, 2013)

Caring for a child with disability might affect the quality of life of the whole family. Most frequently, the term **quality of life** is based on a broader definition of health: *"it is to feel well from a physiological, psychological (mental) and social perspective."* (Prokešová, 2008, p. 17), the World Health Organization defines quality of life *"as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns."* (Vaďurová & Mühlpachr, 2005, p. 11) It is a broad ranging concept affected in a complex way by the person's physical and mental state, social relationships, and personal beliefs in the context of their environment. The concept of the quality of life can be approached from two dimensions, subjective and objective. Today, experts tend to incline to the subjective assessment of the quality of life. They see it as crucial and decisive in the life of humans. (Vaďurová & Mühlpachr, 2005) In the research study, the results of which we would like to summarize, we focused on the subjective assessment of various aspects of the quality of life.

3 Methodological background of the research

Objectives of the research study

The objective of the research study was to identify subjective attitudes of the parents of a disabled child to selected aspects of the quality of their life.

Partial objectives were to identify:

- The extent to which the family of a child with disability subjectively perceives the degree of financial and physical burden as a result of child care,
- How the parents subjectively evaluate coping with their child's disability,
- Whether the presence of a child with disability in the family affected the partnership of the parents caring for the child,

- How the parents subjectively evaluate the amount of free time and whether the family is assisted by another person in terms of child care,
- Whether the child with disability has a sibling and how the parents evaluate the relationship between the siblings,
- How the parents subjectively perceive the positives and negatives resulting from their care for a child with disability.

Research methods

The research was carried out by means of a **questionnaire**. There are a number of standardised methods for identifying the quality of life, life satisfaction, etc. For the purposes of this research study a specific questionnaire was developed based on our experience from previous research. The questionnaire contains 21 items; 11 semi-closed, 4 open, 3 closed and 3 scale items. The closed questionnaire items offer a choice between two or more possible answers, for example yes – no – I don't know. Semi-closed items combine the advantages of closed and open items by adding the "other" option, which allows to express an own opinion even to a closed question. Open items provide the respondent with an opportunity to comment in detail and describe a broader framework. In this way, the respondents can point to important associations and contexts. (Svoboda, 2012)

The research questionnaire was divided into several parts. The first part focused on basic information about the respondents and their children. The next part asked about the experience and opinions of the respondents and their subjective perception of various aspects of the quality of life.

Description of the respondents and the analysed environment

For cooperation in the context of the research study we addressed the parents of pupils from an elementary school, practical elementary school, special elementary school, hospital elementary school, hospital nursery school, nursery school and practical school located in the Zlín Region.

A total of 60 questionnaires were distributed. Of the total of 60 questionnaires, 37 returned. The return rate was 62%. The research sample consisted of 37 parents of children with disability.

4 Presentation and interpretation of the research results

Basic information about the respondents and their children

In the course of the research, we firstly identified **basic information about the respondents and their children.** The first item of the questionnaire identified whether the questionnaire is completed by the **mother, father or another family member**. The questionnaire was completed by 34 (92%) mothers, and 3 (8%) fathers. The second item asked about the **age of the respondent**. As shown in Table 1, the most frequent age category of the respondents was 40–49 years (18; 49%). The next age category was 30–39 years (16; 43%). Other categories included one respondent each.

Table 1: Age of the respondents.

Age of the respondent	**20–29 years**	**30–39 years**	**40–49 years**	**50–59 years**	**60 years and older**	**Total**
Number	1	16	18	1	1	37
Percentage	2.67	43	49	2.67	2.67	100

The third item asked about the **age of the child with disability**, who the questionnaire is aimed at. Children aged 11–13 years represented the largest group (12; 32%). The number of children aged 8–10 years was 10 (27%). The number of children aged 14–16 years was 8 (22%), the number of children aged 4–7 years was 6 (16%). 1 (3%) child is older than 17 years (see Table 2).

Table 2: Age of the child with disability.

Age of the child	**4–7 years**	**8–10 years**	**11–13 years**	**14–16 years**	**17 years and older**	**Total**
Number	6	10	12	8	1	37
Percentage	16	27	32	22	3	100

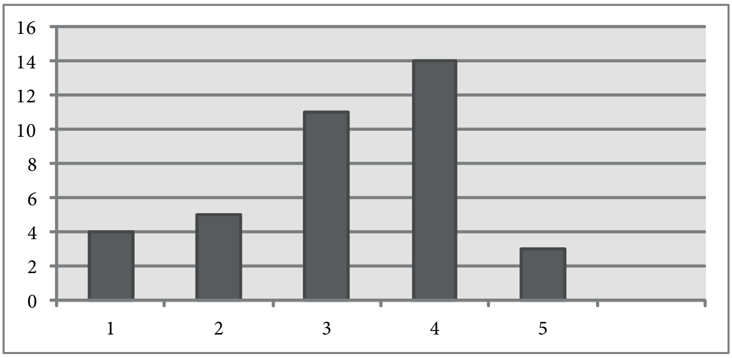
The fourth item identified the **type of disability.** The most frequent was **mental disability** (23; 62%). 11 (30%) respondents indicated **multiple disabilities**, 7 (16%) respondents indicated **physical disability**, 1 respondent indicated **sensory disability**. The respondents also had to indicate another type of disabilities. This opportunity was not used by any of the respondents.

The fifth item examined **when the parents discovered the disability of their child**. 13 (35%) respondents learned about the disability of their child right after birth, 9 (24%) respondents within six months after birth, 6 (16%) respondents during pregnancy. The option "at another time" was indicated by 7 respondents with the following comments: "*at the age of five weeks", "around five years of age", "at the age of two years", "during pre-school age", "at the age of three years*" (2 respondents), *"at the age of four years"*.

The sixth item asked whether the families use any of the **facilities for individuals with disability**. "Yes" was indicated by 27 (73%) respondents, "no" was indicated by 10 (27%) respondents. If "yes" was indicated, the respondents had an opportunity to specify the facility. 10 respondents indicated a school, 4 respondents indicated a charitable organization, 1 respondent indicated an educational and psychological counselling centre, 1 respondent indicated the Tamtam early intervention centre.

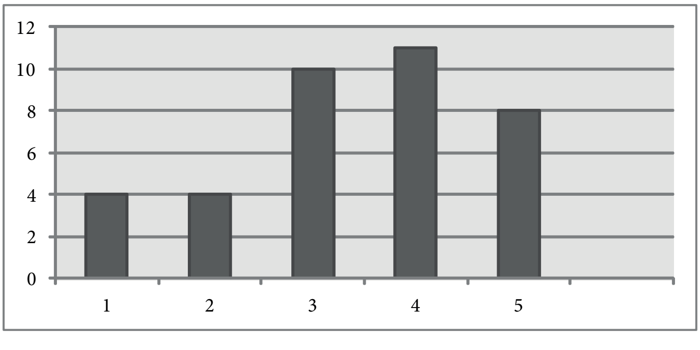
Financial and physical burden as a result of child care

The seventh item examined the subjectively perceived **degree of financial burden on the family**, resulting from the care for a child with disability. The respondents answered on a 1 to 5 scale, where 5 meant "most burdensome". The most numerous group of respondents indicated "4" (14 respondents; 38%), followed by "3" (11 respondents, 30%). The degree of burden "2" was indicated by 5 (14%) respondents, "1" and "5" jointly by 3 (8%) respondents. Graph 1 shows that most of the parents perceive the financial burden on the family as relatively high. The assessment of "4" and "5" was indicated by a total of 46% of the respondents, as opposed to those who do not perceive any financial burden as a result of child care (22%). The assessment of "3" can be regarded an average financial burden.



Graph 1: Subjective perception of financial burden on the family as a result of caring for a child with disability.

The eighth item examined the subjectively perceived **degree of physical burden on a caring person**. The respondents answered on a 1 to 5 scale, where 5 meant "most burdensome". The most numerous group of respondents chose "4", this was indicated by 11 (30%) respondents. This is followed by "3", which was indicated by 10 (27%) respondents. The degree of physical burden "5" was indicated by 8 (22%) respondents, "1" and "2" jointly by 4 (11%) respondents. Graph 2 shows that most of the parents perceive the physical burden on the caring person as relatively high. The assessment of "4" and "5" was indicated by a total of 52% of the respondents, as opposed to those who do not perceive any physical burden as a result of child care (22%). The assessment of "3" can be regarded an average physical burden.



Graph 2: Subjective perception of physical burden on the family as a result of caring for a child with disability.

Level of coping with the child's disability

The ninth item examined the subjectively perceived **level of coping with the child's disability**. Most of the interviewed respondents (17; 46%) state that they try to cope with the disability of their child. 9 (24%) respondents state that the "coping" took longer. **8 (22%) respondents state that they will never cope with their child's disability**. Only 3 (8%) respondents state that they have coped with their child's disability quickly. The "other" option was indicated by one respondent: *"it's hard"*.

Degree of influence on the partnership of the caring parents

The tenth item examined **whether the child's disability had an influence on the partnership of the caring parents**. The relationship of most of the parents (13; 35%) was from the beginning disrupted by the birth of a child with disability. 10 (27%) respondents state that the child's disability had no effect on their partnership. 7 (19%) respondents state that the relationship fell apart, on the contrary, 4 (11%) respondents consider their relationship more solid than before the birth of a child with disability. 2 (5%) respondents consider their relationship seriously disrupted.

Amount of free time of the parents and assistance with child care by another person

The eleventh item focuses on **free time of the caring parent, specifically its degree**. Very little free time is perceived by 25 (68%) respondents. A sufficient amount of free time is perceived by 9 (32%) respondents. The "other" option included the following answers: *"I have some free time in the morning, when he is at school"; "just about enough"; "when he is at school – no time during holidays"*. From experience we can say that the degree of free time of caring parents is generally very low – depending on the assistance of another person, they devote almost all free time to their child with disability.

In the twelfth item the caring parents were supposed to assess whether **a person assisting with the care for the child with disability in the parents' absence would be of any benefit**. 15 (41%) respondents state that they use the assistance of another person. 9 (24%) respondents state that they have not thought about this option. 5 (14%) respondents state that they do not need any assistance. 4 (11%) respondents are planning to ask for assistance, and 3 (8%) respondents state that they do not want anybody to assist them.

The thirteenth item examined whether the caring parents **are assisted by another person**. 31 (84%) respondents gave an affirmative answer, 6 (16%) respondent gave a negative answer. If the answer was "yes", the respondent was supposed to indicate who helps the most. The following answers were indicated: son, grandmother, family, parents, charitable organization, friend, grandparents, assistants, nurse. **The most commonly indicated response was the family (17 times).**

The next item of the questionnaire examined **the frequency of assistance by another person**. The most common assistance is occasional (12; 32%), followed by several times a week (8; 22%), several times a month (7; 19% of respondents) and daily (6; 16% of respondents).

The fifteenth item examined whether the caring parents **go out** with **their child with disability**. 34 (92%) respondents state that they go out with their child, 3 (8%) respondents state that they do not go out with their child. If the respondents gave a positive answer, they were supposed to indicate where they take their child. The respondents indicated swimming pool (21), trips (17), shopping (16), holidays (15), cinema (8), theatre (6), family centres (5), entertainment centres, family celebrations, visits, charitable organization, wherever I need to go, etc.

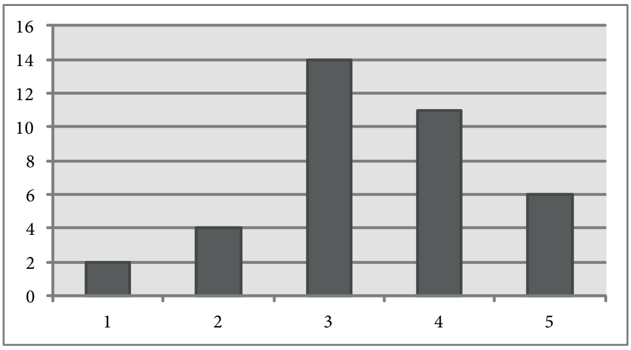
Sibling of a child with disability

The sixteenth item examined whether the child with disability has a sibling. 22 (59%) respondents gave an affirmative answer, "no" was indicated by 15 (41%) respondents. We were interested in the **relationship between the sibling and the child with disability**. A normal sibling relationship was indicated by 20 (91%) respondents, the option of indifference was indicated by 2 (9%) respondents. A very positive finding was that the remaining two options (*"the relationship seems to be disrupted", "he/she is ashamed of him/her"*) were not indicated by any of the respondents.

The eighteenth item examined **whether the parents give more care to the child with disability than his/her siblings**. 16 (73%) parents state that they "give more care to the child with disability than his/her siblings". 6 (27%) respondents state that they "give equal care to all children".

In the nineteenth item the caring parents were supposed to **subjectively assess and evaluate the assistance provided to families with disabled children by the state**. The respondents answered on a 1 to 5 scale, where 5 meant "the worst". Graph 3 shows that the most frequent answer is "3", which was indicated by 14 (38%) respondents, followed by "4", which was indicated by 11 (30%) respondents, "5" was indicated by

6 (16%) respondents, “2” was indicated by 4 (11%) respondents, and “1” by 2 (5%) respondents.



Graph 3: Subjective perception of the level of state assistance with the care for a child with disability.

Subjective perception of the positives and negatives resulting from the care for a child with disability

The twentieth item examined what the respondents consider **positive/negative to ensure the quality of life for themselves, their family and their child/children**. The answers are presented in Table 3.

Table 3: Positives/negatives in relation to ensuring the quality of life of families with a child with disability.

Positives	**Negatives**
• *“Possibilities of the school, social services.”* (mother, 43 years old) • *“When we know that we have somebody to turn to, when the child is happy, when assisting organizations help us with child care.”* (mother, 46 years old) • *“Establishment of schools and classes for children requiring extra care.”* (mother, 39 years old)	• *“Subordination of my life to the needs of the child.”* (mother, 35 years old) • *“Uncertainty in the future when the child is adult.”* (mother, 39 years old) • *“We need to provide everything ourselves, little interest of the state and state institutions.”* (mother, 40 years old) • *“Excessive integration at any cost.”* (mother, 50 years old)

• *"Assistance provided by civic associations, educational organizations and teachers in the process of education, and the provision of the necessary equipment easing my child's disability."* (mother, 40 years old) • *"The positive is that we love each other, assistance provided by the family, friends, school, care allowance."* (mother, 38 years old) • *"The family holds together, mutual support, understanding of similar fates, empathy."* (mother, 31 years old) • *"Car allowance."* (father, 37 years old) • *"I know where the child is – school."* (mother, 31 years old) • *"Peace, comfort, pure love at home."* (mother, 42 years old)	• *"I'd like more assistance by the state in all respects."* (mother, 37 years old) • *"Minimum assistance by the state, lack of understanding of what it takes and what effect a child with disability has on the family."* (mother, 36 years old) • *"I am seriously ill myself, my husband is responsible for everything, I miss quality time with my daughter."* (mother, 39 years) • *"Restrictions for family members – in terms of time, space (hobbies, trips, visits) – according to the child's needs."* (mother, 29 years old) • *"The negative is the human environment."* (mother, 63 years old) • *"It is impossible to live actively as a family (sports and regular activities)."* (mother, 31 years old) • *"The care allowance is ridiculous, it should feed both my son and me, it's impossible for me to get a job, the care for my son is too demanding."* (mother, 50 years old) • *"Hopelessness, impossibility of improvement."* (mother, 33 years old) • *"Constant supervision of the child, increased attention, in the evening I'm completely exhausted."* (mother, 35 years old)

In the last, twenty-first item, the respondents had an opportunity to comment on the issue beyond the scope of the questions contained in the questionnaire. The text below presents the respondents' comments:

- *"My baby is so unique and I, my husband and the whole family take him as such."* (mother, 43 years old)
- *"I don't like the fact that non-walking children with mental disability are treated differently from walking children, the care for a walking child with mental disability is very demanding, especially mentally."* (mother, 41 years old)

- *"One gets used to anything, but if I could choose, I'm sure I wouldn't go for this voluntarily. A healthy sibling is a necessity in such family, if possible."* (mother, 38 years old)
- *"The financial support of the state could be higher, especially with increasing age of the child and the parents, a higher allowance would be desirable – assistance and relief services. There's a dilemma whether the parents can afford it. These services are paid, so their use is limited by the financial situation of the family."* (mother, 36 years old)
- *"The worst was to face the fact that I have a disabled child."* (mother, 40 years old)
- *"This is an involuntary situation, but one has to adapt, family support is important."* (mother, 38 years old)
- *"If it is possible and the parents manage, it is good to have more children, and especially not to fear that they will be disabled!"* (mother, 32 years old)
- *"What sometimes bothers me is the environment, I don't want people to watch us through rose-coloured glasses, we rather need a normal environment, not compassion."* (mother, 35 years old)

5 Conclusions and discussion of research results

The objective of the research study was to identify the subjective attitudes of the parents of a disabled child to selected aspects of the quality of their life. The research involved 37 families of children with disability. Firstly we examined basic personal data about the respondents and then asked about the experience and opinions of the respondents and their subjective perception of various aspects of the quality of life.

In the context of the partial objectives we were first interested in the extent to which the family of a child with disability subjectively perceives **the degree of financial and physical burden as a result of child care**. The respondents answered on a 1 to 5 scale, where 5 meant "most burdensome". In the case of financial burden the most numerous group of respondents indicated "4" (14 respondents; 38%), followed by "3" (11 respondents, 30%). The degree of burden "2" was indicated by 5 (14%) respondents, "1" and "5" jointly by 3 (8%) respondents. The assessment of "4" and "5" was indicated by a total of **46%** of the respondents, as opposed to those who do not perceive any financial burden as a result of child care (**22%**). The assessment of "3" can be regarded as an average financial burden. It can be concluded **that most of the parents perceive the financial burden on the family as relatively high**. The similar applies to subjectively perceived degree of physical burden on a caring person. The most numerous group of respondents chose "4", this was selected by 11 (30%) respondents. The score "3" was indicated by 10 (27%) respondents. In terms of physical burden, the score "5" was indicated by 8 (22%) respondents, "1" and "2" jointly by

4 (11%) respondents. The assessment of "4" and "5" was indicated by a total of **52%** of the respondents, as opposed to those who do not perceive any physical burden as a result of child care (**22%**). The assessment of "3" can be regarded as an average physical burden. It can be concluded that **most of the parents perceive physical burden on the caring person as relatively high.**

We were also interested in how the parents **subjectively evaluate coping with their child's disability**. Most of the interviewed respondents (17; 46%) state that they "try to cope with the disability of their child". 9 (24%) respondents state that the "coping" took longer. **8 (22%) respondents state that they will never cope with their child's disability**. Only 3 (8%) respondents state that they have coped with their child's disability quickly. The "other" option was indicated by one respondent: *"it's hard"*.

We were also interested in whether the presence of a child with disability in the family affected **the partnership of the parents caring for the child**. The relationship of most of the parents (13; 35%) was from the beginning disrupted by the birth of a child with disability. 10 (27%) respondents state that the child's disability had no effect on their partnership. **7 (19%) respondents state that the relationship fell apart**, on the contrary, 4 (11%) respondents consider their relationship more solid than before the birth of a child with disability. **2 (5%) respondents consider their relationship seriously disrupted**.

We were further interested in how the parents subjectively evaluate **the amount of free time and whether the family is assisted by another person in terms of child care**. Very little free time is perceived by 25 (68%) respondents. A sufficient amount of free time is perceived by 9 (32%) respondents. The "other" option included the following answers: *"I have time in the morning, when he is at school"; "just about enough"; "when he is at school – no time during holidays"*. From experience we can say that **the degree of free time of caring parents is generally very low – depending on the assistance of another person, they devote almost all free time to their child with disability**. 15 (41%) respondents use the assistance of another person. 9 (24%) respondents have not thought about this option, 5 (14%) respondents state that they do not need any assistance. 4 (11%) respondents are planning to ask for assistance, and 3 (8%) respondents state that they do not want anybody to assist them. Assistance is mostly provided by **the family (indicated 17 times),** son, grandmother, parents, charitable organization, friend, grandparents, assistants, nurse. The most common assistance is occasional (12; 32%), followed by several times a week (8; 22%), several times a month (7; 19% of respondents) and daily (6; 16% of respondents).

We were also interested in **whether the child with disability has a sibling and how the parents evaluate the relationship between the siblings**. 22 (59%) respondents gave an affirmative answer, "no" was indicated by 15 (41%) respondents. A normal sibling relationship was indicated by 20 (91%) respondents, the option of indifference was indicated by 2 (9%) respondents. A very positive finding was that the remaining two options (*"the relationship seems to be disrupted", "he/she is ashamed of him/her"*) were not indicated by any of the respondents. 16 (73%) respondents state that they "give more care to the child with disability than his/her siblings". 6 (27%) respondents state that they "give equal care to all children".

We were also interested in **how the parents subjectively perceive the positives and negatives resulting from their care for a child with disability**. The parents were often satisfied with financial contributions, support provided by the school, relaxed atmosphere; on the other hand, they expressed fears and uncertainties in relation to the future of the child, the necessity to subordinate their life to the child, the low amount of financial contribution especially as the child becomes older, etc. Many of the parents recommend and encourage to have another child: *"If it is possible and the parents manage, it is good to have more children, and especially not to fear that they will be disabled!"* (mother, 32 years old)

6 Conclusion

The results of the research points out that a family caring for a child is burdened both financially and physically, which influences the quality of life of all its members. **A greater financial burden** is perceived by 46% of respondents. A greater physical burden of caring for a child with disability is perceived by 52% of respondents. The answers of the respondents also indicate a frequent **degree of dissatisfaction with the help of the state provided to families with a disabled child**. Whether it be material support or a greater understanding on the part of the state and state institutions. The results also point to an **influence on the partnership of the parents** caring for their child with disability – 41% partnerships undergo major or minor difficulties and 14% of the respondents state that their relationship fell apart. There is also an influence on **the area of free time of the parents** caring for their child with disability and the corresponding **high degree of fatigue**. The research also indicates that a crucial role is played whether a family caring for a child with disability is assisted by another person or institution, who take over some responsibilities. In 84% of cases the respondents are assisted in the care for their child with disability by another person, who is in most cases a family member. The respondents also seek help in school facilities and charitable organizations. Also, a very interesting issue is **coping with the disability of the child**, which provides opportunities for psychological support provided to families of children with disability. (8% of the respondents state that they will never cope with their child's disability.)

If we compare the observed problematic areas for example with the results of the research *"Quality of life of families caring for member with severe health disability"*, which was carried out in the Czech Republic in 2010, also here some items such as **loss of the parents' ability to enjoy free time** or **feelings of great fatigue** were indicated by the caring persons quite often – in 34.10% and 43.35% of the respondents. (Michalík, 2010, available from http://www.sancedetem.cz/cs/hledam-pomoc/deti-se-zdravotnim-postizenim.shtml, [quoted 19 August 2015]) The results of the *Research of stressful and resilient factors and tendencies in persons caring for a family member with health disability in the capital city of Prague* show that the most common state reported by the caring persons is a loss of personal life perspectives (35.2%). 33.3% of the respondents experience a feeling of great fatigue and 29.8% a loss of the ability to enjoy free time. (Michalík & Valenta in Titzl, 2008)

It would surely be desirable to think about other ways of supporting the families of children with disability. In particular, the provision of appropriate information so that the parents are aware of the possibilities to resolve their situation and to use the services available in the Czech Republic, including, for example, voluntary services. A very important aspect is the development of a system of social, educational and health services, which the parents of a child with disability can use. Moreover, it is vital to focus on psychological support of families of children with disability, and to promote the partnerships among parents, stress coping strategies, abilities to accept a child with disability, relaxing techniques, etc. It is important to develop possibilities for the parents to relax and thus prevent feelings of great fatigue.

"Even though it is desirable to develop a system of supporting the families of children with disability, it is necessary to realize that the caring families do not represent a single monolith made up of identical elements, needs and possibilities. On the contrary – if there is a unity consisting of various elements, it has to be the families of children with health disability. This statement is the cause of numerous misunderstandings and problems. The systems of public support are, according to their nature, designed to address general social issues, they are usually unable to and cannot, in the context of general legislation, respond with sufficient sensitivity to specific problems of the families of children with disability, which are beyond the general model." (Michalík, 2010, p. 3)

In conclusion, I would like to thank the parents who participated in the questionnaire survey and who care for their children with love, understanding, empathy and a desire to provide for their children as well as for themselves a usual full life, although it is often not easy. Let me conclude by quoting one of the mothers who summarized the situation very aptly: *"What sometimes bothers me is the environment, I don't want people to watch us through rose-coloured glasses, we rather need a normal environment, not compassion."* (mother, 35 years old)

References

[1] DUŠKOVÁ, L. & SVOBODOVÁ, L. (2006). Co to je kvalita života. In DVOŘÁKOVÁ, Z. a kol. *Svět práce a kvalita života: vliv změn světa práce na kvalitu života: výzkumný projekt v rámci programu Moderní společnost a její proměny.* 1st ed. Praha: Výzkumný ústav bezpečnosti práce, p. 18–21.

[2] KOZÁKOVÁ, Z. (2005). *Psychopedie.* 1st ed. Olomouc: Univerzita Palackého v Olomouci, 74 p.

[3] KOZÁKOVÁ, Z. (2013). *Special Education of Persons with Mental Disabilities.* 1st ed. Olomouc: Univerzita Palackého v Olomouci, 113 p.

[4] KOZÁKOVÁ, Z. (2014). The life quality of families with a member with a mental disability. In International Scientific Conference. Society, integration, education. Latvia, May 23–24.

[5] MATĚJČEK, Z. (2005). *Výbor z díla.* 1st ed. Praha: Karolinum.

[6] MICHALÍK, J. [online]. *Děti se zdravotním postižením* [quoted 19 August 2015]. Available from World Wide Web: <http://www.sancedetem.cz/cs/hledam-pomoc/deti-se-zdravotnim-postizenim.shtml>.

[7] MICHALÍK, J. & VALENTA, M. (2008). Výzkum stresujících a resilientních faktorů a tendencí osob pečujících o člena rodiny se zdravotním postižením na území hlavního města Prahy In TITZL, B. a kol. *Speciální pedagogika: časopis pro teorii a speciální praxi speciální pedagogiky.* Praha: Univerzita Karlova, Vol. 18, No. 2, p. 149–169.

[8] MICHALÍK, J. (2010). Rodina pečující o člena se zdravotním postižením – známe ji? “OHROŽENÉ DÍTĚ II” Conference, Praha. [quoted 19 August 2015]. Available from: <http://www.nadacesirius.cz/ soubory/prilohy/Rodina-pecujici-o-clena-se-zdravotnim-postizenim-1.pdf>.

[9] PROKEŠOVÁ, M. (2008). *Volný čas z hlediska kvality života.* 2nd ed. Ostrava: Ostravská univerzita v Ostravě, 68 p.

[10] RŮŽIČKOVÁ, H. (2015). *Aspekty kvality života rodin dětí s postižením.* Thesis. Olomouc. Univerzita Palackého v Olomouci. Ústav speciálně pedagogických studií. Supervisor: Mgr. Zdeňka Kozáková, Ph.D., DiS.

[11] SVOBODA, P. (2012). *Metodologie kvantitativního speciálněpedagogického výzkumu.* 1st ed. Olomouc: Univerzita Palackého v Olomouci, 123 p.

[12] VAĎUROVÁ, H. & MÜHLPACHR, P. (2005). *Kvalita života: teoretická a metodologická východiska.* 1st ed. Brno: Masarykova univerzita v Brně, 143 p.

[13] VÁGNEROVÁ, M. at al. (2009). *Náročné mateřství.* 1st ed. Praha: Karolinum.

[14] VANČURA, J. (2007). *Zkušenost rodičů dětí s mentálním postižením.* 1st ed. Brno: Společnost pro odbornou literaturu – Barrister & Principal, 151 p.

(reviewed twice)

Mgr. Zdeňka Kozáková, Ph.D.
Institute of Special Education Studies
Faculty of Education
Palacký University
Žižkovo náměstí 5
771 40 Olomouc
Czech Republic
e-mail: Zdenka.Kozakova@upol.cz

PICO(T) and PCD formats of clinically relevant questions in the conceptualization of special education research

(overview essay)

Jan Chrastina

Abstract: *The paper defines basic clinically relevant questions in the standardized PICO(T) and PCD formats, their application, stages and components. The objective is to describe the importance of the components of a clinical question applied in the preparatory and conceptual stage of (not only) special education research. Evidence Based approaches represent a well-defined methodological approach to the practice (assessment, intervention, diagnosis, evaluation), as well as a basic procedure for the preparation of research activities (literary research, definition of objectives, searching for the best relevant studies – evidence). The content of the paper might be used for high-quality preparation of a theoretical framework of qualitative research approaches, theoretical background of quantitative research approaches, as well as a framework for the selection of adequate relevant publication outputs. The paper contains the methods of analysis/synthesis and description of the findings that can be applied in special education reality. Therefore, the paper defines and describes the two most common formats of clinically relevant questions – PICO(T) a PCD. The paper can also be used as a methodological procedure in the areas mentioned above, as well as an educational approach applicable in teaching future professionals at university (the Evidence Based process starts by formulating clinically relevant questions).*

Keywords: *PICO(T), PCD, clinically relevant questions, Evidence Based Practice, design, special education*

1 Introduction

The preparatory stage of a research study, the choice of its design, as well as the conceptualization of its approach are very significant for the subsequent research activities. One of the possibilities supporting the aspect mentioned above is the use of *clinically relevant questions* (also referred to as *clinical questions*). These questions can be used to make precise and unify the scientific approach with an emphasis on its correctness and subsequently the accuracy of application. An emphasis is on the topicality of scientific findings, their relevant selection, and also the support of the knowledge of existing findings in a specific area of research. Regarding the fact that the approach to the definition of clinically relevant questions uses key words (and their combinations), this is a highly correct and comprehensive approach that particularly supports the necessary elements of conceptualization and operationalization of the concepts, variables, or the correctness of the use of theoretical concepts for empirical research application. A clearly defined procedure of methodological work is achieved by *Evidence-Based Decision Making*.

The described approach of practice based on evidence (*Evidence Based* or *Evidence-based*) approach is used primarily in the areas of *Evidence Based Practice* (EBP), together with *Evidence Based Medicine* (EBM), which has been used since 1992. Later the following approaches were defined: *Evidence Based Nursing* (EBN), *Evidence Based Dentistry* (EBD), *Evidence Based Health Care* (EBHC), *Evidence Based Public Health* (EBPH) and other approaches based on evidence. Evidence-based practice combines the best evidence obtained through a research activity and clinical experience, and also "patient values", which facilitate clinical deliberation or clinical decision-making.

The founder of EBM is believed to be A. Cochrane (1909–1988). Currently, EBM research centres are located in the USA, Canada, Australia, New Zealand and Great Britain (Santos, Pimenta, Nobre, 2007). EBP "communicates" the results of research and integrates *the best possible evidence* for individualized care (intervention) for the patient (client, recipient of support, care, etc.) (Jarošová, Zeleníková, 2014). The best evidence reflects case studies, opinions of experts and basic scientific principles. Evidence-Based approaches are conscious, attentive, clear and deliberate applications of current best evidence (facts) in the process of decision-making on the optimum care/support/interventions regarding a specific client (care recipient).

The concept is widely applicable, and although the text above mentions the term "patient" (due to initial EBP and EBM approaches), today the concept can be applied to a wide range of target groups of recipients of care, support, interventions (sick, client, pupil, etc.) All EBP approaches tend to achieve a clearly defined objective – to improve the care (effectiveness of interventions, quality of support, etc.) provided through the best research results in the field. Due to the dynamic development of EBP approaches, today there are more approaches such as the *Evidence Based Education*, or *Evidence Based Special Education* (sometimes, special education disciplines are ranked among the main category of "Education") and others. At the same time this is a great tool applicable in education (university, continuing professional), and a basis for a case report seminar or supervision (Yan et al., 2010).

2 Stages of the Evidence-Based concept

As already mentioned, the Evidence-Based approach is a systematic, methodological procedure designed to achieve a clearly predefined objective. Therefore, it is imperative to respect the five (seven since 2010) stages specified below (Líčeník, 2009; Yan et al., 2010):

1) Assume and reflect on a *critical attitude to practice, procedures, approaches* etc. (this means to teach professionals/students to be aware of and accept the uncertainty and ambiguities in the provision of care/intervention/diagnostics, etc. All persons involved should be able to assume a critical attitude to their own practice, as well as the practice of other professionals participating in the delivery of care).
2) Choose a *clinical question* – problem (i.e. "*clinically relevant question*"). This stage uses the standardized PICO(T) format and its alternatives, or other formats.
3) *Search for the best relevant evidence* (it is essential to know appropriate databases and search strategies, this stage uses (well) formulated clinical questions according to the standardized PICO(T) format (or another format). Individual elements (components) of a clinical question can be the keywords for initiating the search procedure. Keywords generated from the clinical questions only direct the search procedure; for a comprehensive search they must be appropriately combined with a controlled dictionary (the best known example in the health care area is "*Medical Headings – MeSH terms*") (Santos, Pimenta, Nobre, 2007).
4) *Critically appraise the evidence*, information (has to be up-to-date) – important attributes of this stage are *validity, clinical relevance and applicability.* Prior to application into practice, the evidence that was searched and identified (fulltexts of published studies and research) must be critically appraised on the basis of predefined criteria – in this way the evidence is subjected to fundamental questions, particularly: "Is the evidence valid?"; "Is the evidence important enough to change something?"; "Is the evidence applicable to 'my' client or situation/conditions?"; "What type of text is it (meta-analysis, clinical recommendation, controlled trial, case report)?" and others.
5) *Apply the evidence (results) of research to practice* + evaluate changes.

Another alternative is the 5 stages of clinical decision making – the "*5A model*". These stages include the following (according to Žiaková, Gurková, 2010; Yan et al., 2010):

1) Formulating an answerable question (*Asking*).
2) Getting the best information (*Accessing*).
3) Critical evaluating of the cogency and relevance of the information (*Appraising*).
4) Applying the information in practice (*Applying*).
5) Assessing the practical implication of application (*Assessing*).

To evaluate the quality of searched evidence (study), the following aspects are significant (Santos, Pimenta, Nobre, 2007):

1) *For what reason (for what purpose) was the study carried out, and what hypothesis did the team of authors test?* (The initial parts of the research paper should briefly summarize the context – background of the research. This should be followed by a brief overview of published literature on the issue. The hypothesis should be clearly defined).
2) *What type of study was used?* It is necessary to find out what type of study the publication describes, whether primary or secondary. (A *primary study* is the author's own research. In contrast, secondary study summarizes and concludes on the basis of on the results of published primary studies. A *secondary study* is built on the highest level of evidence).

Primary studies include *experiment – randomized controlled trial (RCT), – cohort study – case-control study – cross-sectional study – case report – series of cases.* Secondary studies include:

1) *Non-systematic reviews* (summarize two or more primary studies), *systematic reviews* (summary of all available original studies, published and unpublished), *meta-analyses* (combine numerical/statistical data from multiple studies).
2) *CPG* – clinical practice guidelines.
3) *Decision-making analyses.*
4) *Economic analyses.*

The most famous (and most used) databases for searching for findings (evidence) include Cochrane Library, EBSCO host, ProQuest, Ovid Medline, CINAHL (Cumulative Index To Nursing and Allied Health Literature), MEDLINE, PubMed, PsycInfo, BioMedNet, Medscape, Gale PowerSearch, Journals@Ovid, Health and Wellness Resource Center, SAGE Full – Text Collections, OVID Proquest Best Evidence, Czech database BiblioMedica and many others. The resources that can be used in searching for "evidence" include books, journals, and guidelines, but also high-quality studies, case reports and expert opinions (Gu, Dyserinck, Loep, Frijns, 2004; Santos, Pimenta, Nobre, 2007). The top database containing world quality research is the Web of Knowledge (formerly "Web of Science").

3 Designing a clinical question using the standardized PICO(T) format

To formulate a clinical question means to define hypotheses, i.e. associations that are searched for, explored and described. Clinical questions are usually of the following two types (according to Hoogendam et al., 2012):

1) *Basic questions ("asking")* – are of a general nature: "who, what, when, where, how, why?"
2) *Specific questions ("foreground questions"),* which are more comprehensive, and usually compare *two variables.*

To design clinical questions, most frequently the standardized *PICO(T)* format is used. The name combines the initial letters of the main components of a clinical question: P – I – C – O – (T). The "T" component in brackets ("*Time*") is an optional constituent/alternative, therefore, another version of the standardised format is "*PICO*". In designing a clinical question according to the PICO(T) standard, numerous didactic aids and guides can be used (Melnyk, Fineout-Overholt, 2005) (e.g. *PICO Worksheet and Search Strategy* or *Template for the formulation of a PICO(T) question* and many others). Individual components of the PICO(T) format are listed below – see Figure 1.

Designing a clinical question using the PICO(T) format		
P	*Patient – Population – Problem*	definition of a client or a group of clients affected by the problem
I	*Intervention – Issue of Interest*	intervention/action with a selected client, subject of interest
C	*Comparison Intervention/C. Group*	comparison of interventions or groups
O	*Outcome*	expected result (to be evaluated)
(T)	*Time*	time framework, for which the question is defined ("in what time?")

Figure 1: Designing a clinical question using the PICO(T) format

On the basis of the above, a clinical question designed according to the PICO format might be for example as follows: *"In the case of adult clients in residential social institutions – retirement homes (P), is the application of the IADL scale for the assessment of daily activities (I) a better prevention of the dependence on another person (O) than the overall evaluation of the condition during a planned assessment by an ergotherapist (C) in an adult client?"*. The next two examples (according to Žiaková, Zeleníková, 2010) using the PICO standard are described below – Figure 2.

P	I	C	O
Clients with dementia (*specify*)	Short range of cognitive functions (SPMSQ)	Test of mental functions (MMSE)	Chronic confusion Memory disorder
Clients with Parkinson's syndrome (*specify*)	(Barthel) ADL Index	Lawton-Brody IADL, HAW	Self-sufficiency in activities of daily living

Figure 2: Application of the PICO standard – examples

In this way, questions can be formulated using the format also for other purposes (classification of findings, working with significance of evidence, level hierarchy, etc.), not only for the purposes of teaching (using e.g. case studies), such as:

1) *"Can the Vojta method of reflex locomotion in children with central cerebral palsy improve the subjective component of the quality of life?"*
2) *"Do centrally acting muscle relaxants in adult clients with the medical diagnosis of cerebral palsy (G84) influence chronic spasticity of the lower extremities?"*
3) *"Does the application of antiedema preparations in children with non-communicating hydrocephalus reduce the risk of sudden death?"*
4) *"Can the presence of a family member of a client with dementia in the case of Alzheimer's disease reduce the risk of admission to a specialized facility or a hospital?"*

Over time, as a result of the development and the dynamic nature of Evidence-Based approaches, other applicable standardized clinical questions (based on the PICO format) have been defined. They include for example (Jarošová, Zeleníková, 2014; Shardt et al., 2007; Yan et al., 2010):

1) "Mandatory" basic format: **PICO**.
2) **PICO(T)** format: T = "*time*".
3) **PICO(TS)** format: time + S = "*settings*".

4) **PICOTT** format: T1 = "*Type of question (being asked)*" (therapy/diagnosis/harm/prognosis/prevention) + T2 = (*the best*) *"Type of study/study design (for that particular question)"* (systematic review/RCT/cohort study/case control).
5) **PICO(M)** format: M = "*methodology*" (methods, approaches).
6) **PECO** format: E = "*exposure*".
7) **PICo** format: Co = "*context*" (defined for qualitative studies).
8) Other formats.

Examples of formulated clinical questions (according to Gurková, Žiaková, 2009) are as follows:

1) *Which diagnostic procedure (test, scale) … can be used for more precise diagnosing of…?*
2) *Are … more precise for diagnosing … than…?*
3) *How to interpret the results of a test of…?*
4) *Which diagnostic features are significant for diagnosing … in clients with…?*
5) *What is the clients' experience with … disease … in the time of…?*
6) *Does … prevent a future risk of … in…?*

The questions usually reflect one of these areas (Jarošová, Zeleníková, 2014; Yan et al., 2010): a) Therapy/intervention; b) Etiology, "damage"; c) Diagnostics, assessment, diagnosis; d) Diagnostic tests, tools, etc.; e) Forecasting, predicting; f) Meaning, importance; g) Prevention; h) Others.

The current practice of publishing research results also includes (based on Evidence Based approaches) definitions of the use (non-use) of searches (evidence, studies) – *Evidence Based Searching* (Guyatt, 2002; Schardt et al., 2007; Straus, 2005) such as:

1) *Unguided*, i.e. *non-PICO searches.*
2) *PICO-guided searches.*

(Not only) for the needs of the application of Evidence Based approaches in teaching (and educational practice), there are tools that evaluate the accuracy of the definition and application of various components of a clinical question. Such tool is for example *The Fresno Test of Competence in EBM* (where "0 = *no definition*"; "1 = *limited definition*"; "2 = *partial definition*"; "3 = *complete definition*") (Lai, 2009).

4 PCD format of a clinical question

The PCD format of a clinical question is an alternative way of formulating using the above mentioned approach and procedures. It consists of the initials of the main components – "P – C – D" (Levin, Lunney, 2004):

1) P = "*Population*" (group of clients, patients, recipients of support/care, etc.)
2) C = "*Cue Cluster*" (significant set of data about the client/patient).
3) D = "*Differential Diagnosis*".

Examples of the application of the PCD format as a clinical question for finding relevant evidence are described in the table below (according to Žiaková, Gurková, 2010) – see Figure 3.

P	C	D
Clients with an oncological diagnosis *(specify)*	Lack of initiative, absence of confidence in own abilities, lack of activity	Hopelessness Helplessness Inefficient burden management
Clients with dementia in the case of Alzheimer's disease *(specify)*	Outbursts of anger, dissatisfaction with care, insomnia	Sleeping disorder Anxiety Fear

Figure 3: Application of the PCD format – examples

5 Barriers to the application of the EBP concept

The main barriers include the following (Hrstková, 2011; Greenhalgh, 2003; Mandysová, Hlaváčková, 2009):

1) Smaller selection of databases in the Czech language.
2) Impossible access to organizations (fee), language barrier.
3) High fee for database access.
4) Insufficient theses-based evidence.
5) Insufficient knowledge about EBP and its strategy.
6) Poor understanding and negative view of EBP.
7) Conservative approach to EBP.
8) High number of assigned patients/clients.
9) Administrative and organizational problems of the department.
10) Time lag between the publication of the results of the research and the application of these results into practice.

11) Lack of time to gather information, lack of information.
12) Complexity of the content of the findings, poor understanding of the research, negative view of the research.

6 Conclusion

Evidence-Based approaches are highly effective in the process of improving the quality of care (support, interventions) care for various patients, clients, etc., as well as a methodological process of searching for relevant findings – evidence of the highest level of relevance. Although there are numerous barriers to the application of evidence-based practice, in the area of conceptualization of the design of special education research this is a very effective, systematic and methodologically designed "tool". I see its application primarily in searching for (literary research) relevant, specific and unique findings (evidence, studies, fulltexts), which can be further used. The findings can be sorted, classified, and/or eliminated in order to use the most valid outcomes to develop the background of research or publication activities. Currently, another format allowing wide applicability in everyday practice is the *PIO format of a clinical question* (the "control/comparison group" component is not applied), another frequent format is the *PECO format* (patient – exposure – control/comparison – outcome) (McKeon, McKeon, 2015), or other completely new formats *LIS Question, PESICO, ECLIPSE, SPICE* and others (Davies, 2011).

Acknowledgements

The paper is dedicated to the following project: "*Perception of subjective impact of health disability/presence of chronic disease and concept of health awareness and literacy* (IGA_PdF_2015_003)".

References

[1] DAVIES, K. S. (2011). Formulating the Evidence Based Practice Question: A Review of the Frameworks. *Evidence Based Library and Information Practice*. 2011, vol. 6, no. 2, pp. 75–80.
[2] GREENHALGH, T. (2003). *Jak pracovat s vědeckou publikací. Základy medicíny založené na důkazu*. Praha: Grada.
[3] GU, P., DYSERINCK, H., LOEP, M., FRIJNS, J. (2004). Finding the evidence for therapeutic PICO questions on four electronic resources. *Library Review*. 2004, vol. 53, no. 3/4, pp. 142–149.
[4] GURKOVÁ, E., ŽIAKOVÁ, K. (2009). Ošetřovatelská diagnostika v kontexte praxe založenej na dôkazoch. *Kontakt*. 2009, vol. 11, no. 1, pp. 32–37.
[5] GUYATT, G. (2002). *Evidence-Based Medicine Working Group; American Medical Association. Users' guides to the medical literature: a manual for evidence-based clinical practice*. Chicago, IL: AMA Press.

[6] HOOGENDAM, A., de VRIES ROBBÉ, P. F., OVERBEKE, A. J. P. (2012). Comparing patient characteristics, type of intervention, control, and outcome (PICO) queries with unguided searching: a randomized controlled crossover trial. *Journal of the Medical Library Association: JMLA*. 2012, vol. 100, no. 2, pp. 121–126.
[7] HRSTKOVÁ, P. (2011). *Místo výzkumu a evidence based practice v ošetřovatelství*. Úspěšně obhájená diplomová práce. České Budějovice: Jihočeská univerzita v Českých Budějovicích, Zdravotně sociální fakulta.
[8] JAROŠOVÁ, D., ZELENÍKOVÁ, R. (2014). *Ošetřovatelství založené na důkazech. Evidence Based Nursing*. Praha: Grada Publishing.
[9] LAI, N. M. (2009). Dissecting students' bedside clinical questions using the 'PICO' framework. *Medical Education*. 2009, vol. 43, no. 5, pp. 471–499.
[10] LEVIN, R. F., LUNNEY, M. (2004). Improving Diagnostic Accuracy Using a Evidence-Based Nursing Model. *International Journal of Nursing Terminologies and Classifications*. 2004, vol. 15, no. 4, p. 114–122.
[11] LÍČENÍK, R. (2009). *Klinické doporučené postupy: obecné zásady, principy tvorby a adaptace*. Olomouc: Univerzita Palackého v Olomouci.
[12] MANDYSOVÁ, P., HLAVÁČKOVÁ, E. (2009). Ošetřovatelství založené na důkazech – zahraniční databáze. *Sestra*. 2009, roč. 19, č. 3, s. 19–20.
[13] McKEON, J. M. M., McKEON, P. O. (2015). PICO: A Hot Topic in Evidence-Based Practice. *International Journal of Athletic Therapy & Training*. 2015, vol. 20, no. 1, pp. 1–3.
[14] MELNYK, B. M., FINEOUT-OVERHOLT, E. (2005). *Evidence-Based Practice in Nursing and Healthcare*. Philadelphia: Lippincott Williams.
[15] SANTOS, C. M. C., PIMENTA, C. A. M., NOBRE, M. R. C. (2007). The PICO strategy for the research question construction and evidence searach. *Revista Latino-americana de Enfermagem*. 2007, vol. 15, no. 3, pp. 508–511.
[16] SCHARDT, C., ADAMS, M. B., OWENS, T., KEITZ, S., FONTELO, P. (2007). Utilization of the PICO framework to improve searching PubMed for clinical question. *BMC Medical Informatics and Decision Making*. 2007, vol. 7, no. 16, pp. 1–6.
[17] STRAUS, S. (2005). *Evidence-based medicine: how to practice and teach EBM*. Edinburgh, UK and New York, NY: Elsevier/Churchill Livingstone.
[18] YAN, X., NI, Q., WEI, J., XU, H. (2010). Evidence-based Practice Method of Integrative Chinese and Western Medicine Based on Literature Retrieval through PICO Question and Complementary and Alternative Medicine Topics. *The Chinese Journal of Integrated Traditional and Western Medicine Press and Springer-Verlag Berling Heidelberg*. 2010, vol. 16, no. 6, pp. 542–548.
[19] ŽIAKOVÁ, K., GURKOVÁ, E. (2010). Využitie princípov praxe založenej na dôkazoch pre zlepšenie ošetrovateľskej diagnostiky v klinickej praxi. *Ošetřovatelství* a *porodní asistence*. 2010, vol. 1, no. 1/2015, pp. 17–23.

(reviewed twice)

Mgr. et Mgr. Jan Chrastina, Ph.D.
Institute of Special Education Studies
Faculty of Education
Palacký University Olomouc
Žižkovo náměstí 5
771 40 Olomouc
Czech Republic
e-mail: jan.chrastina@upol.cz

Living with retinitis pigmentosa: Visual perceptual difficulties

(scientific paper)

Helena Chacón-López, M. Dolores López-Justicia

Abstract: *The aim of this study was to determine the state of the visual perception of 26 people with RP and 31 without visual impairment, using the TVPS (Test of Visual Perceptual Skills), as well as to find out the subtests on which those affected by RP have more difficulties and those on which they have less. Another aim of the study was to determine the relationship between Near Visual Acuity (NVA), Visual Field (VF) and visual perceptive performance. The results showed differences in all subtests between both groups. A descriptive analysis showed that those affected by RP have greater difficulty on Form Constancy and on Figure Ground and least on Visual Memory subtests. Significant correlations were found between NVA (Spatial Relations and Figure Ground subtests), VF (Visual Constancy and Figure Ground subtests) and visual perceptive performance. It was concluded that the findings of the study have important implications in planning interventions and in designing training programs for activities of daily life, of movement, recreation and social life, since visual perception affects these activities, and in the technological or computerized development of assistance aimed at improving the use of residual vision.*

Key words: *Retinitis Pigmentosa, Visual Perception, Visual Acuity, Near Visual Acuity, Visual Field.*

1 Introduction

Current theories of visual perception suggest that the detection and knowledge of objects depends on a continuous exchange between the perception and comprehension of the external world. That is, there is a constant relationship between perception and cognition, so that visual perception is not a collection of independent processes, but rather the interpretation and recognition of what one sees.

To determine how this process is carried out has motivated a great number of studies, examining the developmental process of visual perception from birth, as well as the role played by one's internal development and the help provided by experience (Kellman & Banks, 1997).

There is no doubt about the relationship between perceptual skills and the activities of daily life carried out by a human being, since these skills are involved in mobility, in reading and writing, in driving, in situations in which one must determine the distance and speed of objects, or distinguish between objects in different positions (Martin, 2006). It has even been noted that people with visual impairment walk more slowly and bump into more obstacles than people without visual impairment (Fuhr, Liu & Kuyk, 2007).

Retinitis Pigmentosa (RP) is an eye disease in which the photoreceptors of the retina (cones and rods) degenerate, causing loss of function and considerably affecting the quality of vision (Adler, 2002; Fernández, 2007).

RP is congenital and progressive, but usually becomes apparent around the age of adolescence. Clinical features are heterogeneous and vary from one person to another. The most common symptoms include involvement of both eyes, loss of peripheral or central vision, weakened vision at night or under poor lighting conditions, problems adapting to changes in lighting, and changes in colour discrimination (Fernández, 2007). These are features that could have a considerable influence on education, socialization, employment (Nemshick, Vernon & Ludman, 1986) and mobility (Geruschat & Turano, 2002, Runsquist, 2004).

So far, there is no medical solution or pharmacological treatment for this pathology. However, visual perceptive training procedures have been applied to adults with low vision, with specific emphasis on figure-ground discrimination (Trudeau, Overbury & Conrod, 1990), concluding that practice and training could improve the functional use of residual vision; although it was also observed that people who were more actively involved in the training made better use of their residual vision (Conrod, Bross & White, 1986). Thus, both practice and motivation seem to be decisive factors in improving the use of residual vision. These results agree with points of view that support the hypothesis that it is possible to improve the use of an organ or of a function in adults through physical, mental, and social activity (Redolat y Carrasco, 1998); in fact, for some years it has been highlighted that the interaction of an organism with its environment shapes the brain and that an enriched environment as well as learning seem to influence the capacity to establish cerebral connections, since use contributes to the maintenance of synapses between neurons (Bauer, 1996).

With respect to VA (Visual Acuity) it has been observed that reduction in this capacity is strongly associated with limitations of the visual performance of people with visual impairment (Laitinen, Sainio, Koskinen, Rudanko, Laatikainen, & Aromaa, 2007), whereas peripheral field loss is associated with limitations of the performance of mobility tasks (Haymes, Guest, Heyes & Johnston, 1996). Long-term changes in VA of people affected by RP have also been studied (Grover, Fishman, Anderson, Tozatti, Heckenlively, Weleber, Edwards & Brown, 1999), affirming that the loss of VA is not immediate; on the contrary, a large number of people retain some residual sight until the end of their days, despite the fact that in other cases it is minimal. This information is of unquestionable value in planning the rehabilitation of these people since they can use their visual potential in different activities of daily life. In the same way, knowledge of their visual perceptive state has significant applications in putting into practice of psycho-educational treatment programs and in the technological or computerized development of assistance aimed at improving the use of residual vision.

The loss of vision in RP is unpredictable and its progress entails a loss of the ability to carry out certain tasks, diminishing self-confidence and self-control of those affected and possibly leading them to perceive themselves in a negative manner (Kiser & Dagnelie, 2008). It must not be forgotten that people affected by RP go through a complex process after being diagnosed with the disease, which usually affects their personality (López-Justicia & Nieto, 2006; Strougo, Badoux et Duchanel, 1997), perhaps due to their perception of the loss of ability to carry out the tasks of daily life, to the feeling of being a burden to their families and their dependence on them for carrying out certain domestic chores, for reading, or for getting around. Difficulties in these activities, in driving a car, or simply crossing a street, and in mobility in general, are frequent (Fletcher & Schuchard, 2006; Fuhr et al., 2007; Geruschat & Turano, 2002; Rundquist, 2004). In fact, it seems to be the loss of function more than the damage itself that produces more pain or suffering (Zeiss, Lewinsohn, Rohde & Seeley, 1996).

There are not many studies that analyse the visual perceptive difficulties of adults with RP, since traditionally children have been the focus both of studies and of the efforts of visual rehabilitation (Greer, 2004). But the changes that have been made, stemming from the contributions of studies carried out (Aguilar, 2005; Trudeau et al., 1990), suggest the advisability of determining the use that people with RP make of their visual perception, since it is known that limitations in visual perception may affect mobility, daily activities as well as recreational and social activities (Brown, Rodger & Davis, 2003; Martin, 2006). For these reasons, the aim of this study was to determine the state of visual perception and the areas or subtests in which people have greater difficulty, and those in which they show greater potential. Depending on the findings, training could be offered the training permits them to improve visual function and educational, professional and social integration, given the difficulty that this problem entails for people who suffer from it (Nemshick, *et al.*, 1986). Another aim was to study whether or not the visual perceptual performance of people with RP differs from that of people without visual difficulties. Finally, the study aimed to determine if NVA (Near Visual Acuity) and VF (Visual Field) had any relationship to visual perceptive activity. According to our research hypothesis the control group was expected to obtain higher scores on all scales.

2 Methodology

2.1 Participants

The sample was formed by 26 people with RP (22 women and 4 men) and 31 people without visual impairment (21 women and 10 men).

People with RP (who made up the experimental group) had a Near Visual Acuity (NVA) ranging between .0 logMAR (equivalent to VA distance 20/20) and 1.3 logMAR (equivalent to VA distance 20/200) (Median = .20; SIR = .11) in the better eye as assessed with a conventional Chart Near Distance and using best- corrected vision. Two of the participants had cataracts, 4 had myopia and 4 had presbyopia (long-sightedness) as well as RP. Their VF was between 5 and 40° (Median = 10.00; SIR = 5). Table 1 shows the scores of each participant on NVA and VF.

Participants satisfied the inclusion criteria of being diagnosed at least 3 years before the study, ranging between 18 and 53 years of age (M = 41. 6 and SD = 12.0), and having NVA between .0 logMAR and 1.3 logMAR and VF of 5 degrees or better.

The group formed for people without visual impairment (control group) ranged between 19 and 49 years of age (M = 24.5 and SD = 7.3). Eight of them were family members (6 spouses, 1 brother and 1 daughter).

Table 1. Scores of each participant on NVA and VF in RP group

Participants	NVA logMAR	VF
1	.50	10.00
2	.40	5.00
3	.70	5.00
4	.20	10.00
5	.00	15.00
6	1.00	10.00
7	.20	30.00
8	.40	10.00
9	.70	5.00
10	.20	10.00
11	1.30	5.00
12	.00	10.00
13	.00	10.00
14	.20	5.00
15	.40	5.00
16	.20	10.00
17	.40	15.00
18	.00	40.00
19	.20	20.00
20	.40	15.00
21	.20	5.00
22	.40	10.00
23	.20	10.00
24	.20	15.00
25	1.30	10.00
26	.00	40.00

2.2 Instruments

A personal questionnaire was drawn up including items on age, gender, duration of RP, and educational level.

Visual perception was evaluated using the TVPS-3 (Test of Visual Perceptual Skills) (Martin, 2006). This is a standardized test used to assist in determining, in school-age children, the capacity to recognize, interpret or give meaning to what is seen. It uses 112 designs in black and white selected from two levels of a previous edition (*TVPS-R*, Gardner, 1996; *TVPS-UL*, Gardner, 1997). The test contains seven subtests, each of which includes 16 items arranged in order of difficulty. The contents of the seven subtests are listed below.

Visual Discrimination (DIS): Ability to note similarities and differences among forms and symbols and be able to distinguish exact characteristics of two forms among other forms.

Visual Memory (MEM): Ability to recall dominant features of one item or be able to find this form from an array of similar forms.

Visual-Spatial Relations (SPA): Determining the position of objects in relation to each other.

Visual Form-Constancy (CON): Ability to recognize the same form even though it may vary in size, directions, position, or be partially hidden.

Visual Sequential Memory (SEQ): Ability to distinguish a group of forms for immediate recall from similar groups of forms.

Visual Figure-Ground (FGR): Ability to distinguish an object from its background.

Visual Closure (CLO): Identifying forms or objects from incomplete representations.

Their reliability (Cronbach's coefficient alpha) ranges from .75 to .88 for subtests, and .96 for the overall test (Martin, 2006). In relation to validity, the authors indicate that the instrument can be used with confidence to assess visual perception of school-age children (Martin, 2006).

This test was chosen because of its usefulness for both diagnostic and research purposes (Martin, 2006) and because it is the only procedure that can be used for people up to 18 years and 11 months old. Although this test was designed for use up to this age, its application in adults can contribute information related to their visual performance as well as other existing tests (Greer, 2004; Quillman, Mehr & Goodrich, 1981; Trudeau et al., 1990). However, the present study used Raw Scores, rather than standardized scores, because the participants were over the age of 18.

2.3 Procedure

This research study was approved by the Institutional Review Board of the University of Granada. A meeting was held with members of the Andalusian RP Association and their families, to explain the aims and the objectives of the study. Having showed their willingness to participate voluntarily, the sample was selected from those affected with RP who had residual vision. Each of those affected was evaluated for ophthalmology in the parameters of NVA and VF. The monocular and binocular kinetic VF was measured with Goldmann perimetry. Although it is habitual to explore NVA and VF on monocular and binocular vision, in this case we considered only binocular information, because the Test of Visual Perceptual Skills is applied in this way.

The sample formed for people without visual impairment was a group of students selected randomly. They were informed of the characteristics of the study and none were opposed to the use of the information for publication. First they were evaluated on visual perception in order to determine their performance in each subscale. Then each of those affected with RP was asked, together with a family member who did not have RP, (this was confirmed by an ophthalmologic evaluation) to complete a personal questionnaire and both were evaluated in the parameter of visual perception. They were evaluated in separate rooms, to avoid interference. The NVA evaluation and visual perception evaluation were performed at a distance of 30 centimetres with their appropriate correction for refractive errors and accommodation anomalies in the RP group. Informed consent was obtained from all participants.

3 Results

In Table 2 the mean scores and standard deviations are included for each of the subtests for the control group and the RP group. On analyzing the mean scores of each subtest for the RP group, we can see that the subtest with the best mean score is the Visual Memory test (M = 10.23, SD = 3.37), followed by Visual Discrimination (M = 9.58, SD = 4.10) and Spatial Relations (M = 9.54, SD = 4.13). On the other hand, the subtests with the lowest mean scores are the Form-Constancy test (M = 7.15, SD = 3.77) and the Figure-Ground test (M = 7.38, SD = 4.14) (see table 2). We can also observe greater standard deviations in the RP group on all scales, which is an indication of greater variability between subjects with RP when compared to the control group with normal vision. We have also included the confidence interval for each subscale in both groups. We can see that none of the intervals overlap, which is evidence of statistical differences between both groups on each of the scales.

We analyzed the number of participants in the RP group whose TVPS was outside the 95% confidence interval for the control group in each of the seven domains. The scale in which there are more participants outside the limit of the confidence interval is the Visual Discrimination scale, with 24 participants. Next is the Visual Sequential Memory scale (22 participants) and the Visual Closure scale (20 participants). The Visual-Spatial Relations scale, Visual Form-Constancy scale and Visual Figure-Ground scale have 19 participants of the RP group outside the confidence interval of the control group. The Visual Memory scale is the one that shows most overlapping, with only 17 participants outside the confidence interval (Table 2.).

Table 2. Mean, Standard Deviation and Confidence Intervals in Two Groups

	RP Group (n = 26)				**Control Group (n = 31)**			
			95% Confidence Interval				**95% Confidence Interval**	
	M	**SD**	**Inf**	**Sup**	**M**	**SD**	**Inf**	**Sup**
DIS.	9.58	4.10	7.92	11.22	12.06	2.26	11.24	12.89
MEM.	10.23	3.37	8.86	11.59	13.29	1.94	12.58	14.00
SPA.	9.54	4.13	7.87	11.20	13.42	1.78	12.76	14.07
CON.	7.15	3.77	5.63	8.67	10.48	2.05	9.73	11.23
SEQ.	8.31	3.52	6.88	9.72	11.97	1.45	11.43	12.49
FGR.	7.38	4.14	5.71	9.05	11.58	2.59	10.63	12.53
CLO.	8.65	4.41	6.87	10.43	13.42	1.84	12.74	14.09

After a descriptive analysis of the results, a contrast of two median scores was conducted to study the differences between the control group and the RP group (Table 3). Since the supposition of normalcy in the scores was not fulfilled (Siegel, 1991), the non-parametric Mann-Whitney test was applied which analyses the differences in range of the scores between the two groups.

Considering a 0.05 alpha level, it can be concluded that there are statistical differences between the control group and the RP group on all of the subtests (see Table 3).

Table 3. Median Score and Differences between Two Groups

	RP Group (n = 26)	Control Group (n = 31)		
	Med	**Med**	**U**	**P**
DIS.	9.50	12.00	252.0	.007
MEM.	11.00	13.00	190.5	.000
SPA.	10.50	14.00	149.5	.000
CON.	6.50	11.00	191.0	.000
SEQ.	8.50	12.00	124.5	.000
FGR.	6.00	12.00	160.0	.000
CLO.	9.00	14.00	134.0	.000

We also explored the role of NVA and VF in visual perception. To analyse the possible relationship with NVA and VF, the Spearman correlation coefficient was calculated between all subscales in the RP group (table 4). The variables that show a greater correlation with NVA are Spatial Relations ($r = .495$; $p = .010$) and Figure-Ground ($r = .405$; $p = .040$); both present a positive and statistically significant correlation ($p < 0.05$). The remaining subtests show a positive though moderate correlation except Visual Memory, while none are statistically significant.

Table 4. Correlation between NVA, VF and TVPS domains

	NVA (logMAR)		VF	
	Correlation	**p**	**Correlation**	**p**
DIS.	–.356	.074	.107	.602
MEM.	–.147	.473	.073	.725
SPA.	–.495(**)	.010	.349	.080
CON.	–.306	.128	.416 (*)	.035
SEQ.	–.282	.163	.232	.254
FGR.	–.405(*)	.040	.393 (*)	.049
CLO.	–.334	.096	.296	.142

* Correlation is significant to level 0.05 (bilateral).
** Correlation is significant to level 0.01 (bilateral).

The variables that show a greater correlation with VF are Form-Constancy ($r = .416$; $p = .035$) and Figure-Ground ($r = .393$; $p = .049$); both present a positive and statistically significant correlation ($p < 0.05$). The remaining subtests show a positive though moderate correlation except Visual Discrimination, while none are statistically significant.

4 Discussion and Conclusions

The first objective of this study was to determine the state of visual perception of people with RP. The results found support our research hypothesis, since we have confirmed poor scores in people with RP on all of the subtests evaluated, compared to people without visual impairment. Despite the necessity to highlight the great variability that exists among affected people, their difficulty in the interpretation and recognition of what they see was observed. This is made clear on observing that the confidence intervals calculated for each group do not overlap on any of the scales.

Another aim of the present study was to determine on which subtests the participants had most difficulty and on which they had least. The mean scores obtained by people with RP show greater difficulties on Form-Constancy ($M = 7.1$) and on Figure-Ground ($M = 7.3$) concluding therefore, that they have greater difficulty finding an object among others when the size, length, or rotation of the object is varied (Martin, 2006). They showed similar difficulties finding an object among others against a complex background. On the other hand, the subtest on which they showed better performance was Visual Memory ($M = 11.2$), leading us to affirm that they have a good ability to remember or recognize a stimulus after a brief period of time (Martin, 2006). Likewise, the high scores obtained in the areas of Visual Discrimination and Spatial Relations by the RP group suggest that they demonstrate a good ability to find differences and similarities between objects and to determine the position of these (Martin, 2006). This data is also of interest and should be taken into account when planning interventions with these people, in putting into practice psycho-educational treatment programs and in the technological or computerized development of assistance aimed at improving the use of residual vision. The control group also scored better on the Visual-Spatial Relations and Visual Memory domain, and worse on the Visual Form-Constancy domain, when compared to other domains, and these differences appear to be relative and consistent across the groups.

With regard to the final objective of the study, to determine the possible relationship between NVA, VF and performance on the subtests, we observed that as NVA diminishes, people with RP obtain worse results on the Visual-Spatial Relations and Figure-Ground tests, results that alert us to the necessity to pay attention to these aspects when there is evidence of changes in NVA. The Figure-Ground score coincides with the study by Quillman el al. (1981) which suggested that VA could be an important factor in the ability to complete these tasks. With respect to VF we can also observe its relationship with the domains where the RP group obtained worse results (Visual Constancy and Visual Figure-Ground). For this reason we can conclude that VF restriction influences and determines the performance on these tasks of those affected since peripheral field loss is associated with these tasks (Haymes, et al., 1996).

As has been shown, there are not many studies that analyse the deficiency and the perceptive potential of adults with RP, since their efforts have traditionally focused on the training of children (Greer, 2004), which impedes us from comparing our results. Nevertheless, we think that the findings of our study have important implications in planning interventions and in designing training programs for activities of daily life, of mobility, recreation and social life, since visual perception affects these activities (Brown et al., 2003; Martin, 2006) as well as in the technological or computerized development of assistance aimed at improving the use of residual vision. Neither must one forget the repercussions that this problem has for the education and employment of those affected by it (Nemshick, et al, 1986), or that the training to improve visual function may favour their social and professional integration. However, we are aware that the results should be considered with caution because the size of the sample was small. Additional studies with larger samples will be needed to confirm our findings. Other limitations of the present study are that the majority of the participants are women and the average age of the participants of the control group was younger.

References

[1] ADLER, R. (2002). La búsqueda de tratamiento para las enfermedades retinianas: lecciones derivadas de la biología molecular y del desarrollo. [Investigation for the treatment of retina disorders. Lessons derived from molecular and developmental biology]. *Visión, 20*, 22–24.

[2] AGUILAR, F. (2005). Razones biológicas de la plasticidad cerebral y la restauración neurológica. [Biological reasons of cerebral plasticity and neurological restoration]. *Plasticidad y neurología, 4*, 5–6.

[3] BAUER, J. (1996). Disturbed synaptic plasticity and the psychobiology of Alzheimer's disease. *Behavioural Brain Research, 78*, 1–2.

[4] BROWN, G., RODGER, S., & DAVIS, A. (2003). Test of Visual Perceptual Skills-revised: An overview and critique. *Scandinavian Journal of Occupational Therapy 10*, 3–15.

[5] CONROD, B., BROSS, M., & WHITE, Ch. (1986). Active and passive perceptual learning in the visually impaired. *Journal of Visual Impairment and Blindness, 80*, 528–531.

[6] FERNÁNDEZ, E. (2007). *Retinosis pigmentaria: Preguntas y respuestas*. [Retinitis Pigmentosa: Questions and answers]. Elche: Cátedra Bidons Egara.

[7] FLETCHER, D. & SCHUCHARD, R. (2006). Visual function in patients with Choroidal Neovascularization resulting from Age- Related Macular Degeneration: The importance of looking beyond visual acuity. *Optometry and Vision Science, 83*, 178–189.

[8] FUHR, P. S. W., LIU, L., & KUYK, T. K. (2007). Relationships between feature search and mobility Performance in persons with severe visual impairment. *Optometry and Vision Science, 84*, 393–400.

[9] GARDNER, M. (1996). *Test of Visual Perceptual Skills-R*. Novato, CA: Academic Therapy Publications.

[10] GARDNER, M. (1997). *Test of Visual Perceptual Skills, Upper Level-R*. Novato, CA: Academic Therapy Publications.

[11] GERUSCHAT, D. & TURANO, K. (2002). Connecting Research on Retinitis Pigmentosa to the Practice of Orientation and Mobility. *Journal of Visual Impairment and Blindness, 96*, 69–85.

[12] GREER, R. (2004). Evaluation Methods and Functional Implications Children and Adults with Low Vision. In A. Lueck-Hall (Ed.) *Functional Vision. A Practitioner's Guide to Evaluation and Intervention* (pp 177–257). New York: AFB.

[13] GROVER, S., FISHMAN, G. A., ANDERSON, R. J., TOZATTI, M. S., HECKENLIVELY, J. R., WELEBER, R. G., EDWARDS, A. O., & BROWN, J. (1999). Visual acuity impairment in patients with retinitis pigmentosa at age 45 years or older. *Ophtalmology, 106*, 1780–1785.

[14] HAYMES, S., GUEST, D., HEYES, A. & JOHNSTON, A. (1996). Mobility of persons with retinitis pigmentosa as a function of vision and psychological variables. *Optometry Vision Science, 73*, 621–673.

[15] KELLMAN, P. J. & BANKS, M. T. (1997). Infant visual perception, In W. Damon, D. Kuhn & R. Siegler (Eds.), *Handbook of child psychology (5th ed.), vol. 2: Cognition, perception and language* (pp. 103–146). New York: Wiley.

[16] KISER, A. & DAGNELIE G. (2008). Reported effects of non-traditional treatments and complementary and alternative medicine by retinitis pigmentosa patients. *Clinical and Experimental Optometry, 91*, 166–176.

[17] LAITINEN, A., SAINIO, P., KOSKINEN, S., RUDANKO, S., LAATIKAINEN, L., & AROMAA, A. (2007). The Association Between Visual Acuity and Functional Limitations: Findings from a Nationally Representative Population Survey. *Ophthalmic Epidemiology, 14*, 333–342.

[18] LÓPEZ-JUSTICIA, M. D. & NIETO, I. (2006). Self-concept of Spanish young adults with RP. *Journal of Visual Impairment and Blindness, 100*, 366–370.

[19] MARTIN, N. (2006). *Test of Visual Perceptual Skills* (3rd edition). USA: Academic Therapy Publications.

[20] NEMSHICK, L. A., VERNON, McC., & LUDMAN, F. (1986). The impact of retinitis pigmentosa on young adults: Psychological, educational, vocational and social considerations. *Journal of Visual Impairment and Blindness, 89*, 859–862.

[21] Quillman, R. D., Mehr, E. B., & Goodrich, G. L. (1981). Use of the Frostig Figure-Ground in Evaluation of Adults with Low Vision. *American Journal of Optometry, 58*, 910–918.

[22] REDOLAT, R. y CARRASCO, M. C. (1998). ¿Es la plasticidad cerebral un factor crítico en el tratamiento de las alteraciones cognitivas asociadas al envejecimiento? [Is cerebral plasticity a critical factor in the treatment of cognitive alterations associated with ageing?] *Anales de psicología, 14*, 45–53.

[23] RUNDQUIST, J. (2004). Low Vision Rehabilitation of Retinitis Pigmentosa. *Journal of Visual Impairment and Blindness, 98*, 718–724.

[24] SIEGUEL, S. (1991). *Estadística no paramétrica aplicada a las ciencias de la conducta*. [Nonparametric statistics applied to behavioral sciences]. Mexico: Trillas.

[25] STROUGO, Z., BADOUX, A., ET DUCHANEL, D. (1997). Problèmes psycho-affectifs associés à la rétinopathie pigmentaire. *Journal Français D' Ophtalmologie, 1997, 20*, 111–116.

[26] TRUDEAU, M., OVERBURY, O., & CONROD, B. (1990). Perceptual training and figure-ground performance in low vision. *Journal of Visual Impairment and Blindness, 84*, 204–206.

[27] ZEISS, A. M., LEWINSOHN, P. M., ROHDE, P., & SEELEY, J. R. (1996). Relationship of physical disease and functional impairment to depression in older people. *Psychology and Aging, 11*, 572–581.

(reviewed twice)

Helena Chacón-López, Ph.D.
Department of Developmental and Educational Psychology
Faculty of Education
University of Granada (Spain)
Campus Universitario de la Cartuja, s/n, C.P. 18071
Granada
Spain
Telephone number: 0034958243975.
e-mail: helenachacon@ugr.es

M. Dolores López-Justicia, Ph.D.
Department of Developmental and Educational Psychology
Faculty of Education
University of Granada (Spain)
Campus Universitario de la Cartuja, s/n, C.P. 18071
Granada
Spain
Telephone number: 0034958243975.
e-mail: dlopezj@ugr.es

Play therapy in therapeutic education

(overview essay)

Petra Mitašíková

Abstract: *Play itself heals. The high-quality, deep and accepting relationship in the context of play therapy, multiplies its therapeutic aspect. Play has preventive effect, helping to prepare to cope with life difficulties and in the case of complex problems is useful even as the treatment.*

The play is in therapeutic education used as basic preventive, therapeutic and educational intervention. Play therapy is used for clients in situations to prevent potential problems and to solve various disadvantages. It provides to clients the possibility of self-expression, abreaction and correction of pathogenic emotional dynamics and also solving urgent current problems.

Keywords: *play therapy, therapeutic education, preventive intervention, self-expression*

1 Introduction

Play can help come through subjective experiences, real or fanciful events and relationships. The play can be solution for different situations and helps achieve calm and inner balance. The play is a freedom in clearly defined borders. It emulates environment that is safe and thus liberating. In the natural free play the player is followed by its internal impulses and adjusts his participation in the play.

The play is also the highest form of freedom of learning. Playing by their own volition – intrinsic motivation, free participation, creativity and imagination helps to learn and understands reality, relationships and own feelings. The play engages all forces: motor, emotional intelligence skills and particular will. Authors Rican, Krejčová et al. (1997) and Rezková (1994) emphasize the concept of free play. They argue that the play is a means of expression of living needs of the child. It reflects his inner world, experiences, ways of thinking, overcoming obstacles, conflict resolution routines, his relationships and problems.

Voluntary participation and personal decision making in natural free play promotes confidence of player. Player is responsible for himself and for what he does has to bear natural consequences. If he wants the play would continue in cooperative way he has to agree with others – to negotiate.

2 Playing activities

When playing the player is doing spontaneously what he wants. He can choose the activity itself, or activity can be offered by someone else. However, he must exercise it at its own discretion. A child who is putting together puzzle upon adults' instructions although is rewarded with a reward is not playing, but performs specified task on the basis of external reward. Child who chooses the same play with building blocks and creates buildings is playing and such a play can be considered an excellent way to promote academic abilities. Child chooses the play spontaneously on an open menu (play was not prescriptively selected and offered for reward) – but child chooses it based on its own volition, interest, intrinsic motivation. In a such selected and implemented play is child tucked deep into the play, concentrated on the activity, constitutes own "work" experiencing the fulfillment of the creative process, which does not make for outside reward – but for himself, for own fulfillment – not the result. Huizinga (2000a) considers the play as a free action, defined by fixed boundaries of space-time, which has an objective in itself, is governed by voluntarily accepted but absolutely binding rules, is accompanied by feelings of tensions and joy, outside the "normal life" and is considered to be a sort of "other" being.

Play activates player's internal dialogue, self-management, encourages independent solving of play situations, invites to respond actively and act practically. Player must be actively involved and interested in the world of toys and reacts on teammates – always in the context of their own experiencing. This activity is intra- and interactive. If a child is playing with a toy or teammate, playful object or another person acting in play develops responses in playing. Induced changes stimulate further reactions – and so begins "chain reaction" mutual exchange of play – play interactions. Tempo, intensity and quality of interactions, players regulate during free playing by themselves and adapt to their own judgment. Player alone decides wheather to kick the ball the whole force, or just gently move the ball. It also decides independently, respectively agree with teammates, how the play will continue. It may also be a situation that teammates will not agree – in such a case the play ends. A child who watches passively (e.g. TV) or passively listens to an adult (e.g. the demonstration how to build a complex construction of Lego) is not playing, because this activity is lacking active interaction, autonomy, practical action on the part of "playing" child. Communication runs only in one direction – from the source to the passive recipient – a child. In such a case adults attempt to regulate child without its active participation. The possibility of an independent research how things work or how relationships work is at such a passive form of obtaining information unnecessary and child is getting ready knowledge.

3 Player and rules

Player in a natural free play is choosing theme, content, tools and mates, creates his/her own rules. Only such a play is considered creative. Sometimes players mimic the practices of others, but in free play it serves more as an inspiration – opposite to slavery, forced repetition. Players in the natural free play have no problem of amending rules, modify them, and leave something out.

The basis of any natural free play is to establish rules to be respected by all participants in the play. Without them, the play would not proceed efficiently. In free play rules arise spontaneously by mutual negotiations. On the basis of consensual negotiation rules are agreed, negotiated either in advance or during the play in order all participants are happy. Compliance with the rules is one of the essential conditions of the play. Once a play participant does not respect the agreed rules, the playing or whole play ends. If we are invited to participate in natural free play, we become participants to it. In play therapy we retain the child play leadership which we verbally, emotionally and practically follow.

Each play has its goal – sometimes conscious, sometimes hidden, because without objective the play would be meaningless. The play is under Borecký (1982) "autotelic", which means that it has meaning and purpose in itself, for playing alone. "Play ends in itself" means that player is not following socially useful purpose, but has only subjective meaning. The idea behind the play is not the result but the process itself.

The play is an important factor in the development of the child and is a diagnostic indicator of developmental level. The play is for players the way they discover and manage surrounding reality that appeals to their emotions, develop their cognitive and interaction skills. It has great significance for social learning. Individual and group free play is in the therapy – the life skills training in an environment of safety, acceptance and trust.

Natural free play has in self-development protective, preventive and curative aspect. According to Sagi (1995, p. 88) is play a manifestation of the child's life, comparable to speech for adults. "If a child cannot play appropriate to its age, is either disabled or suffering from a behavioral disorder" In any case – needs help.

4 Play therapy

In play therapy, we often accompany through the play children into difficult life situations which they need once again to come through. Such a playing has preventive and curative impact.

Already in the kindergarten, and in massive way in the primary school there is a push towards intentional teaching and displacing free playing. Adults proceed to excessive channeling, and free creative activity gets to the periphery of their interest, sometimes is eliminated completely. So children are missing out an instrument of self-expression, creative process and the process of social making contact. There occurs so called play deprivation that leads to emotional, social and intellectual deprivation.

If a child is playing, moving, expressing individually and actively solves problems, manages new ideas and adapts to changes in the surrounding reality – is located in the state of bio-psycho-social well-being. The question is, how much time do we allow children to play freely? What space and what stimuli do we offer them? How do we support their playing? Complaints that children nowadays do not know to play are untenable. Children are often artificially constrained in play by adults – and thus are unwittingly denied self-development needs that are innate. It is we adults who fundamentally suppress play in favor of "more important, better, more significant, more effective" methods of self -development.

The American Academy of Pediatrics (America Academy of Pediatrics – AAP) in compliance with Human Rights Commission of United Nations defines a free play as the right of every child. The importance of the play is underlined with regard to the normal development of the child. Many children do not have enough time for natural free play. Many children grow up in an increasingly fast lifestyle. This may limit the protective effects that arise from the play controlled by children. (CYFERnet, 2008). Medina (2011) states that the manufacturing industry produces fashionable toys that are the opposite of what children really need. Children need according to this author – the play with an open end (Open-Ended Games).

Play therapy in therapeutic education we use and often "revive" and prompting the play at all levels. From the functional play, through constructive, symbolic plays to games with rules. Each of these forms of the play offers a unique experience starting mobility, manipulation, through imagination to cooperative group play with pre-established rules.

According to Piaget in symbolic play assimilation of reality to itself occurs. Assimilation means, each new link is integrated to the previous scheme and structure. External data are immediately incorporated into their internal cycle of the organism. The play can be applied to the objects or situations, change their properties and relationships, and incorporate them into our own experience – in other words – to learn. The play transforms the fact that reality is more – less completely adapted to the needs of the "self". (Piaget, Inhelder, 1997)

A child needs a set of elements, which creates and shapes according to his own will. This meets a system of symbols occurring in a symbolic play. The play instruments are the result of imitation and they become the means for play assimilation. Symbolic play is not just assimilating facts. Play symbolism performs a function which has for adult inner speech. The child is not satisfied only with the event that is excited or interested in the mind, but with the help of symbolism in the game reliving the event.

Free play in play therapy is a way to self-reflection – the statement of inner state of the players. From a diagnostic point of view it can reveal the direction and content of thinking client's emotions, fanciful imagination and dream content. Clients can spontaneously and freely experiment with surrounding objects and their own subjective meanings and thus manage their own reality.

In this sense, Gibbon and Boren (1985 and Hart 1992) see play therapy as the interpretation of children's play, on the basis of which therapists implement appropriate interventions. The therapist helps the child understand their behavior and change it in the right direction.

Therapeutic use of the play is based on early attempts to apply psychoanalytic technique. In psychoanalytic techniques used for patient to uncover fundamental problems it requires verbal skills and comprehension of the patient. The child is not yet capable of their emotional problems, reactions, mood or emotional state. In response to dynamic oriented play therapy there occurs non-directive play therapy, which is one of the basis for play therapy in therapeutic education.

Virginia Axline, a student of Carl Rogers and later his colleague, transferred the philosophy and principles of non-directive counseling of Rogers approach (i.e. belief in the natural tendency of an individual to individual self-development and self-management ability) to work with children in her work "Play therapy. The Inner Dynamics of Childhood", which was published in 1947.

In a relationship characterized by understanding and acceptance, the process of the play allows children to consider new opportunities arising from the review of its own "self". The safety of the therapeutic situation allows children to examine their negative feelings. The main function of the play in play therapy is to change what is not feasible in reality and cope with it through symbolic representations. Axline (1947) sees this process as a means children express their emotionality, gain insight, overview and learn to control or release this emotionality. The play thus allows the child to express himself and release and reduce tensions and anxiety and thus help gain control over own lives.

Non-directive therapy is based on the theory of the structure of personality. It expresses an opinion on the inner potential of each individual. The therapist leaves the responsibility and control to a child who is allowed to do and say whatever he wants. The therapist is friendly and gives the child an opportunity to "re-play" accumulated feelings, tension, frustration and aggression. As they get out, therapist teaches the child to control themself and become psychologically more mature (Axline 1947).

Axline (1947) states the following basic rules for non-directive play therapy:

1. The therapist has to have to a child friendly, warm relationship, leading as soon as possible to a good contact.
2. The therapist also accepts a child, the is.
3. The therapist creates safe environment in which the child can freely express their feelings.
4. The therapist is trying to recognize the child's feelings and reflect them in such a way the child can better understand his own behavior.
5. The therapist believes that the child is able to cope with their difficulties and respects them. Responsibility for the selection of certain behavior and the beginning of internal changes are a matter of the child.
6. The therapist does not seek in any way to influence behavior and speech of a child, does not control, does not manipulate. The child leads the way, followed by the therapist.
7. The therapist does not attempt to accelerate the course of therapy. He is aware that this is a process that must go slowly, step by step.
8. Determination of borders. The therapist determines only the boundaries that are necessary for anchoring therapy in the real world. That helps the child to accept responsibility for the relationship with the therapist.

Landreth (1993) adds that the therapist must try to see, hear, feel and experience the inner world of the child unconditionally. This is possible through the therapist non-judging relationship with the child. The therapist communicates to the child the following message: "I'm here, I listen to you, understand you, and I care about you."

4.1 Basic principles of play therapy

Haim Ginott (1966) formulated the basic principles of play therapy built on the principles of non-directional operation. His recommendations deal with several problems:

1. Adoption or refusal of treatment is the responsibility of an adult.
2. Before the first therapeutic meeting parents need to be "trained" and the importance of play therapy has to be explained to them. The author recommends parents to tell the child before meeting quite simply: "I'll wait here for you, I'm not leaving until you finish in the playroom."

3. Help tightened child with the prevailing anxiety. Therapist at the beginning of the therapeutic meeting says: “It’s a little hard to start” … and leaves the child to take further steps. In this short statement he gives the child to know not only that he understands, but that he also accepts and considers himself able to handle the situation. “Here you can decide yourself…”
4. The child responds to therapeutic playroom according to their behavior patterns. He expects from adult resistance and punishment and will be shaken, when the therapist always comes out to meet him and in peaceful manner will not succumb to the challenges of the child.
5. Building a therapeutic relationship begins with the initial formulation towards the child: “You have an hour of time. You can play with these toys as you want.” By this simple statement we’re telling the child “You have complete freedom to enjoy the play according to your taste and mood. You’ll be respected as an individual, no matter what you feel, what you think, say or do.”
6. Before the end of the therapeutic meeting therapist warns the child: “Five more minutes and finish.” When the time expires he really gets up and says: “For now we’re done. Now you have to go.”
7. In therapy, children need to determine exactly what is accepted and what is not accepted behavior. It is appropriate to reflect aggressive emotional expressions and redirect the play to offer him a safe basis for abreaction of aggression. “The walls here are not for painting. If you want to paint you can paint on paper or board.”
8. Carrying out toys from playroom may be limited simply: “All the toys remain in the playroom.”

According to Guerney (1983) an essential part of therapy is the personality of a child therapist. Non-directive approach eliminates the need for setting behavioral goals in therapy to a minimum. In play therapy, there are different situations of aggression, social isolation, compulsive behavior etc. Non-directive therapist will react to such behavior by creating an atmosphere that will help child to normalize their behavior.

The principle of normalization were brought to the therapeutic education as well by Maria Montessori (2001, p. 25), who says: “Often the child cannot make contact with their environment before is free from the burden and adverse consequences of a previous suppression of speech. In this case we have to heal the child – ‘normalize’ – to unlock this through unconditional adoption, lineup child own path of self-development.” According to Axline (1947) this is reached by complete acceptance of the client in a friendly and warm relationship with therapist. Empathic response in therapy reflects the feelings, contents and demonstrates understanding where the other person is and what is experiencing. The therapist may reflect on three levels. Responds to: Action in the play (e.g. “Are you going to pour it into the coffee pot?”), ideas (e.g. “Do you think you are a small child?”) and emotions. Emotions are the highest type of empathic reflection, which is manifested through play actions and spoken words – (e.g. "it's really hurtful when you do not want your friends to help you.")

Extremely effective way of play therapy is filial play therapy, founded by Dr. Bernard Guerney and Dr. Louise Guerney in 1960 on the principles of non-directive play therapy. They created an intervention program for families with children aged 3–10 years, based on nearly 30 years lasting research. Therapeutic program is also preventive aimed at strengthening parent – child relationship. The child-oriented sessions are led by parents of the child. Parents learn to better understand child's emotions and needs. For parents, this approach helps to develop parental confidence, reduces domestic frustrations, problems and increases feelings of trust towards the child. Parents learn on training meetings therapeutic skills, which they practice in domestic play meetings. They learn four key areas of skills: structuring domestic play meetings, empathic commenting, skills for imaginative play and setting of limits.

In 2001, we have under longitudinal play therapy research identified, based on Grounded theory method, following expressions in play of child with attention deficit hyperactivity disorder. The boy of preschool age showed the most problems in the social sphere.

4.2 Problematic areas of play therapy

Within the game, we observed signs of problematic areas:

1. Inadequate expressions in the play:
    - Disturbance of other children at play (e.g. enter the play without obtaining the consent of children who started the play)
    - Inappropriate handling of objects (e.g. rip children toys out of the hands)
    - Excessive intensity of verbal communication (e.g. comment the play too loud and such a commenting disturbs others)
    - Excessive motions (e.g. take horse, jump around and demolish structures of others)
    - Ignore themes of plays (e.g. take the puppets and just functionally manipulate, near the others play with knowing how to get involved)
    - Frequent slipping into functional handling of the toy during symbolic play … (e.g. a relatively long period of time is devoted to playing with soft doll on the ground)

2. Isolation of the play
    - Frequent secluded playing with constructions – unsocial, outside the play of other children
    - Through the school year, the social isolated playing deepens (often draws alone, rarely selected by children as the play partner)

3. Signs of disturbed balance of mind in the play
    - Impulsive motion embodiment (e.g. "I am the greatest dragon, because I know how to fly…" and wildly, uncoordinatedly diverges and demolishes what stands in his way.)

4. Tensions and their release in the play
    - Individual play with toys gives possibilities to tension ventilation (e.g. car often crashes)
    - When playing in the group accumulated tensions are often represented through symbolic play (e.g. "I shall break the lock on the door, because the dragons are strong." (Symbolic demonstration of force) or "See, I have a powerful car, drives quickly on the table and hit the other car")

5. Low self-esteem
    - Signs of low confidence were frequent (e.g. "Do not show it to him, because they will have a laugh".
    - In situations of comparisons or competitions.

Based on the data collected, we developed "The child manifestations assessment sheet to asses abilities of child with ADHD successfully participate in social playing."

We present the table in abbreviated form:

	Expressions of child	**Yes**	**No**	**Unobserved**	**Comment**
1.	Inability to push new ideas into the group plays				
2.	Inability to participate in a group play				
3.	Failure to participate in the play, holding an adequate acting character				
4.	Disruption of a group play by excessive comments				
5.	During the play, only short time sequences				

6.	Starting number of topics in the play, lack of longer-term development				
7.	Distortion of group plays by aggressive behaviors (destruction, demolition)				
8.	Distortion of play due to undeveloped motoric coordination				
9.	Expressing lack of confidence in play activities				
10.	Trying to hold leadership positions in the play				
11.	Inability to concentrate on the play in a social group compared with single acting play				
12.	The problem to include into group plays after longer absence				
13.	Intentional or unintentional physical threats of mates				
14.	Fails to cope with stressful play situations				
15.	Frequent violations of internal or external rules of the play				
16.	Unawareness of the consequences of uncoordinated activities to the others				
17.	The tendency of aggressive response in conflict situations				
18.	Deficient interpersonal touch sensitivity				
19.	Longer focus in group activities only with adult assistance				
20.	Ignorance of partner invitation to play				

References

[1] AXLINE, V. (1974). *Play therapy.* Cambridge. Houghton Mifflin.

[2] BORECKÝ, V. (1982). *The world of toys.* Prague: Mona.

[3] CYFERnet. 2008 (online) (2008) (cit. 6.13.2014). *Make time for free play.* CYFERnet – Children, Youghal and Families Education and Research Network. Available at: http://www.cyfernet.org/hotnew/04-08-FreePlay.html.

[4] GINOTT, H. G. (1966). *Gruppen-psychotherapy with children.* Berlin, Basel: Beltz Verlag Julius. Weinheim.

[5] HAMWORTHY, L. F. (1983). Client-Centered (Nondirective) Play Therapy. In. Schaefer, the Connor: *Handbook of Play Therapy. A Wiley-Interscience Publication.* New York, Chchster, Brisban, Toronto, Signapore.

[6] HUIZINGA, J. (2000). *Homo Ludens. The origin of culture in the game.* Prague: Dauphin 2000.

[7] LANDRETH, G., L. (1993). Child-centered play therapy. In. *Elementary School Guidance and Counseling*. Oct93, Vol. 28 Issue 1.

[8] MEDINA, J. (2011). *The rules of the baby's brain.* (Orig. Brain Rules for Babies).1. Edition. Computer Press, SpA, Brno. 2011. ISBN 978-80-251-3619-5.

[9] MONTESSORI, M. (2001). *Discovering the child.* SPS. Publishing international educational guidelines. ISBN 80-86-189-0-5

[10] PAVLÍKOVÁ, P. (2001). *Identification, analysis and systematic solution of educational problems of the child with attention deficit hyperactivity disorder through music therapy and play therapy.* Dissertation. Comenius University in Bratislava. Faculty of Education. Department of medical education. Bratislava.

[11] PIAGET, J. B. (1997). *INHELDEROVÁ Child Psychology.* Prague: Porta.

[12] REZKOVÁ, V. (1994). *Soft law play therapy*. PPP Prague.

[13] ŘÍČAN, P., KREJČOVÁ, D. et al. (1997). *Clinical Child Psychology*. Grada Publishing. Prague. ISBN 80-7169-512-2.

[14] SAGI, A. (1995). *Problem child in kindergarten*. Prague: Portal, 1995. ISBN 80-7178-067-7.

(reviewed twice)

Petra Mitašíková. Ph.D.
Department of Therapeutic Education
Comenius University
Bratislava
Slovak Republic
e-mail: petra.mitasikova@gmail.com

Barriers to employment for persons with disabilities as correlate of economic contribution to national development: the case of Owerri, Nigeria

(scientific paper)

Orim, Samuel Orim

Abstract: *This study investigated barriers to employment for persons with disabilities as correlate of economic contribution to national development: The case of Owerri, Nigeria. A survey of fifty (56) persons with disabilities of which 52 were applicants and four were already in the workforce in Owerri, Nigeria constituted the sample for the study. Three null hypotheses guided the study. A twenty (20) item questionnaire with a modified four point Likert scale and reliability coefficient of 0.79 was used to canvass responses of the purposively sampled participants on barriers to employment for persons with disabilities as correlate of economic contribution to national development. The data collected were statistically analyzed using Pearson Product Moment Correlation Analysis. The findings revealed that social stigma, competitive Nigeria labour market and employers' undue focus on the disability statistically relate with economic contribution to national development. Recommendations were made among others that there should be enactment of laws which will favour employment of persons with disabilities in public and organized private sectors. In this regard, a specific percentage or quota should be allotted to the persons with disabilities in compliance to UNESCO mandate. Similar laws are in operation in some developed countries; Nigeria should adopt such a law to give to these persons a pride of place in the society.*

Key words: *employment, economic contribution, national development and disabilities*

1 Introduction

Persons with disabilities have long suffered undue economic disadvantages by reason of their disabilities which have sidelined them from social and economic participation resulting to decline in income opportunities. The social, political, economic, health and educational status of persons with disabilities has greatly been trailing far behind those without disabilities because they are yet to be integrated into all domains of the society as citizens particularly in a developing country like Nigeria. The United Nation Convention on Rights of Persons with Disabilities defined disability as an evolving concept, and that it results from the interaction between persons with impairments, attitudinal and environmental barriers that hinder full and effective participation in the society on an equal basis with others without disabilities (UNESCO, 2006).

Department for Work and Pensions (2006) stated that during the past 20 years, national governments and advocates of persons with disabilities have attempted with increasing vigor to integrate disabled people into the broad social and economic life of society. These attempts have included efforts to both raise awareness of the contributions and skills of these people and reduce barriers to participation in public activities. An important component of this is ensuring that persons with disabilities have access to the same opportunities to seek and remain in employment as non-disabled people.

International Labour Organization (ILO) (2011) encouraged the integration of disabled people into the labour force. This reflects a growing sense that employment can both benefit the individual and reduce future government expenditures on disabilities grants. Government and taxpayers can expect to benefit from reduced expenditures on public assistance as low-income disabled people enter employment, as well as from increased tax revenue from new earnings. Department for Work and Pensions (2006) also noted that employers form a checker to determine whether or not these societal expectations are transformed into reality for disabled people.

Getting to work and maintaining the work is regarded as one of the key areas where people with disabilities have felt disadvantaged. The issue of employment has attracted considerable attention by both the Human Rights and Equal Opportunity Commission and the Productivity Commission. Employment plays a critical role in providing persons with disabilities with a sense of community both in workplace and social networks. Harnessing all human resources and potentials in the development process produced increased economic viability, productivity and efficiency in all domains of economic growth. Accordingly, discrimination that erects barriers to the full and equal involvement of people with disabilities in the work force can have widespread and profound negative effect on the economy considering Nigeria Vision 2020 (Adenosin & Tochukwu, 2012).

It is against this background that this research is conceived to focus on most common barriers to works for persons with disabilities in Owerri, such as social stigma, competitive labour market and employers' undue focus on "the disability" rather than the potentials of persons with disabilities. Also the linear relationship of the above with economic contribution of persons with disabilities to national development shall be investigated upon.

2 Social stigma

Social stigma is extreme and undue disapproval of persons with disabilities through the vehicle of negative attitudes and perception towards them in the workplaces. Social stigma is a serious issue with a critical and long lasting impact on persons who are being discriminated against and treated unfairly. Persons with disabilities are frequently not considered potential members of the workforce in Nigeria and this has greatly declined the productivity and efficiency of the economy. Perception, fear, myth and prejudice continue to limit understanding and acceptance of disability in workplaces in Nigeria. Myths abound that persons with disabilities repel potential customers and place a stigma on the name of the organization, and thus accommodating them in the workplace is derogatory with the impending low productivity of the organization.

Chukwuemake (2014) in his empirical studies reported that unfair treatment and discrimination against persons with disabilities at work took a variety of forms, such as inappropriate job placement, social distance, working hours, assessment of work performance or appraisal, underutilization of skills, underpayment. Contrary to these myths, many companies have found that persons with disabilities demonstrate commitment and devotion to work increasing the overall productivity and human capacity. The real obstacle lies with employers and employees without disabilities. Many are still hesitant to take on employees with disabilities because they believe they may create problems in the workplace due to their socio-psychological anomalies. There is also the assumption that this type of appointment will incur cost as the workplace has to be retrofitted with disability-friendly designs to accommodate them. It is common to observe colleagues' lack of understanding and flexibility in their dealing with coworkers with disabilities. In some cases, workers with disabilities have been shunned and harassed by potential employers by reason of their disabilities (Handicapped International 2006; State Service Commission 2002). Social stigma has greatly hampered persons with disabilities from contributing their quota to national development through equal access to work which is a major economic activity.

3 Competitive Nigeria labour market

There is no denying the fact that there is evident shrinkage of Nigeria labour market where it is an issue of survival of the fittest; and those with disabilities are consistently disadvantaged. The realities of Nigeria labour market obviously reveal that supply of skilled personnel is greater demand to the detriment of job seekers with disabilities. Simply put, the labour market is saturated. Labidho and Ken (2009) revealed their findings that the employers of labour in Nigeria have now evolved a maze of criteria in which bodily features of employees is upheld in recent times to squeeze out those with physical deviations. Consequently, job seekers with good resume are grossly denied access to work opportunities due to their disabilities, making it unrealizable for them to act as contributing members of the society. The authors further stated that this issue has sidelined great potentials from contributing adequately to the development of the national in a variety of facets of Nigeria economy. Some that are employed are given wrong job placements despite their skills and knowledge; and wage gap characterize the employment of persons with disabilities in Nigeria. Low levels of employment and high rates of unemployment and inactivity reflect the huge labour market disadvantage of people with disability. The difficult labour market integration of people with disability poses a bigger threat to Nigeria's realization of vision 2020 as well as global competitiveness in various domains. The reverse can contribute to raising the productive capacity of the economy and reduce the costs associated with disability benefit programmes. Borino and Hindo (2015) stated that the recent deep recession and its associated and still ongoing jobs crisis are likely to worsen labour market opportunities for people with disability. Research-based analysis shows that persons with disability bear the brunt of economic recession more than people without disability. Most worryingly, the education gap between people with and without disability has widened the gap which further intensifies the shrinkage in employment prospect for persons with disabilities in Nigeria labour market system (Ghiji and Jirusalam, 2013).

4 Employers' undue focus on the disability

It is not uncommon to see employers of labour focused unduly on "the disability" rather than looking at the "abilities and potentials" of persons with disabilities and the contribution of these employees to the financial strength and sustenance of their organizations. Deska and Ressir, (2009) in a study revealed that employers tend to have this erroneous assumption that employees with disabilities are likely under-perform in most professional areas of service delivery. This group of people is seen as those that lack ability in everything despite the area of disability. The report further stated that employers give priority to providing humanitarian services individually or as an association at regular interval rather than give a person with disabilities work because of a prejudicial attitude. Employers stereotype persons with disabilities as indolent, unambitious, inconsistent, costly to employ and sickness-prone employees. While few employers of labour include a certain number of disabled people in employment, the types and wages of the jobs typically are not on par with those offered to non-disabled people. In some workplaces employees with disabilities have been segregated from colleagues and customers to avoid that "stigma" on the organization (Murray & Heron 1999; Smith 2004). Evidently, it is seen that:

- Interviewers' lack of expectations, and focus on a person's impairment rather than on their skills and abilities (Equal Employment Opportunity Trust 2005)
- Public perceptions focusing on impairments rather than ability (International Labour Office 2002).

5 Economic cost of excluding persons with disability from workforce

The global commitment to equalizing social and economic opportunities for persons with disabilities is both for humanitarian and economic purposes. From the economic perspective, it is expected to increase the human capital of persons with disabilities to contribute to self and the development of the society as well as enable them to reduce their dependence on income transfers and other forms of public support. This economic expectation reflects the understanding that disability is a development issue and if this category is sidelined from development process it reduces human capital for national development (Jiru & Lorra, 2011).

The World Bank (2010) considers that leaving people with disabilities outside the economy translates into a forgone GDP of about 5–7 per cent. People with disabilities often have to rely on their families or on charity for survival. Furthermore, women with disabilities are generally worse off than men with disabilities; they have less access to jobs and earn half the income of male peers in similar jobs. Participation in economic life is a necessity. People with disabilities need to earn a living and contribute to the support of their families, which can only be achieved through unhindered access to work and full appreciation of their potentials to promote economic growth of any nation. Bari and Kril (2007) stated that economic activity is also one factor that promotes self-actualization and self-esteem of persons with disabilities thereby giving them a sense of inclusion. Work offers people with disabilities the opportunity to be recognized as contributing members of their communities. When society offers people with disabilities a variety of options, such as opportunities to work fulltime, sporadically, part-time and/or part-year, as well as volunteer placements, the result is the empowerment of those who have traditionally been barred from a chance to function at their individual and societal best (Itre & Galuo, 2001).

Metts (2004) stated that disability tends to reduce economic output by reducing or eliminating the economic contributions of certain members of society, particularly people with disabilities. The amount by which economic output is reduced in this way constitutes the net economic cost of disability. Thus, the make-up for this economic lost is the ability of the society to fully integrate persons with disabilities into the workforce as means of harnessing all human capital for national development. A disability-inclusive approach to development seeks to include people with disability in the development process by recognizing their potential, valuing and respecting their contributions and perspectives, honouring their dignity, and effectively responding to their needs (AusAID 2008).

There is an increasing awareness that people with disabilities can gain both socially and economically from full participation in national development through inclusion in the workforce. That is true not only because of the obvious link between economic security and employment, but also because of the understandable connection between well-being, self-esteem and meaningful employment. Hugh (2005) stated that the best way to fight benefit dependence and exclusion among people with disability is to promote their re-integration into employment. This helps to increase any nation's human capital thereby raise the prospect of higher longer-term economic output.

The lost productivity can result from insufficient accumulation of human capital (underinvestment in human capital), from a lack of employment, or from underemployment (World Bank 2010). Some studies have sought to estimate the indirect costs to people with disabilities and their households. A study from 1986 found that one disabled child who does not receive appropriate rehabilitation and inclusion may place a burden on the community up to 6 times more (European Commission, 2010).

Several policy documents make the case that a disability-inclusive approach may have broader economic benefits for society as a whole. Adopting a disability-inclusive approach may have benefits for society as a whole: actively including people with disability and creating more accessible and inclusive communities will not only benefit them, it results in more successful and sustainable development for all. Disability-inclusive development significantly contributes to achieving the SDGs targets in that increasing employment levels among disabled people increases both the amount of goods and services produced in the economy, and the demand for goods and services (Ausaid, 2008).

Statement of the problems

Despite the efforts of the international development agencies such as World Bank, United Nations and World Health Organization to promulgate policies and legislation that aim at preventing discrimination in areas such as employment, and with the increasing recognition of the economic benefits of employing people with disabilities, the employment rate in Owerri has remained low compared to the rate for people without a disabilities. This denial of opportunities for economic, social and human development breeds hunger and poverty, and its immediate adverse effect is low socioeconomic status of the family, dependency and eventual family neglect, and by extension, constitutes economic loss to the nation. Secondly, research and experience increasingly abound that the rate of participation of persons with disabilities in workforce correlates with their level of economic contribution to national development thereby predicting the Domestic Gross Product.

Also it has been experienced that the economic output as well as the development in Owerri has grossly been affected due to deliberate sidelining of persons with disabilities from workforce. In Owerri, economic activities such employment has excluded human capital with disabilities resulting to the stalling of economic growth. It is against this background that the research is keen finding out the relationship between barriers to employment for persons with disabilities and their economic contribution to national development. The problem is what relationship exists between social stigma in workplaces, Nigeria competitive labour market as well as employers' undue focus on the disability; and economic contribution of persons with disabilities to national development?

Purpose of the Study

The purpose of this study was to investigate barriers to employment for persons with disabilities as correlate of economic contribution to national development: The case of Owerri, Nigeria. Specifically, it aimed at finding the relationship between:

1. Social stigma against persons with disabilities in employment and economic contribution to national development
2. Nigeria competitive labour market and economic contribution to national development
3. Employers' undue focus on the disability and economic contribution to national development

Research Hypothesis

To direct the study, a null hypothesis was formulated that:

1. There is no significant correlation between social stigma against persons with disabilities in employment and economic contribution to national development
2. There is no significant correlation between Nigeria competitive labour market and economic contribution to national development; and
3. There is no significant correlation between employers' undue focus on the disability and economic contribution to national development

Material and methods

The study adopted a survey research design. Purposive sampling technique was used to select 56 (fifty six) persons with disabilities in Owerri of which 52 where applicants and four were gainfully employed. The instrument for data collection was a questionnaire of twenty items with a modified 4 point Likert scale. It was used to elicit responses from respondents on the correlation between barriers to employment for persons with disabilities and economic contribution to national development. The instrument was validated and has reliability coefficient of 0.80 obtained through Cronbach Alpha method of determining reliability. Pearson Product Moment Correlation Analysis was used to analyze the data obtained from 56 respondents.

Presentation of Result

Research hypothesis One: There is no statistically significant correlation between social stigma against persons with disabilities in employment and economic contribution to national development. The hypothesis testing and its analysis are done in Table 1 below.

Table 1: Pearson Product Moment Correlation Analysis of the Relationship between social stigma against persons with disabilities in employment and economic contribution to national development (N=56).

Variables	Mean	SD	ΣX^2 ΣY^2	ΣXY	Sig	R
Social stigma against persons with disabilities in employment	11.32	4.65	911.21			
Economic contribution to national development	13.41	5.21	1571.41	388.18	0.005	0.61

$P < 0.05$ Degree of Freedom (df) = 54

The Table 1 above revealed that social stigma against persons with disabilities in employment having a mean of 11.32 and Standard Deviation of 4.65 and economic contribution to national development having also a mean of 13.41and Standard Deviation of 5.21 produced an $r = 0.61$ is significant at $p < 0.05$ and at df of 54 indicates that social stigma against persons with disabilities in employment is significantly related to economic contribution to national development.

Therefore, the null hypothesis was rejected. This shows that the more social stigma against persons with disabilities in employment prevails the lower is their economic contribution to national development. Conversely, when this barrier to employment is removed, these individuals tend to participate actively in the development of the national economy. Conclusively, less social stigma against persons with disabilities in employment promotes higher the economic output of any nation; hence all the human capital is harnessed to boost the economy in all domains.

Research hypothesis Two: There is no statistically significant correlation between Nigeria competitive labour market and economic contribution to national development. The hypothesis testing and its analysis are done in Table 2 below.

Table 2: Pearson Product Moment Correlation Analysis of the Relationship between Nigeria competitive labour market and economic contribution to national development (N = 56)

Variables	**Mean**	**SD**	**ΣX^2** **ΣY^2**	**ΣXY**	**Sig**	**R**
Nigeria competitive labour market	13.14	5.23	1693.01			
economic contribution to national development	13.41	5.21	1571.41	1110.10	0.000	0.54

$P < 0.05$ Degree of Freedom (df) = 54

In Table 2 above Nigeria competitive labour market has a mean of 13.14 and Standard Deviation 5.23 while economic contribution to national development has a mean of 13.41and standard deviation of 5.21. The correlation coefficient obtained from Pearson Product Moment Correlation between Nigeria competitive labour market and economic contribution to national development is $r = 0.54$ at df of 54 is significant at $p < 0.05$. The result shows that Nigeria competitive labour market has a positive significant relationship with economic contribution to national development. Therefore, the null hypothesis was rejected. This shows that the shrinkage in Nigeria labour market has greatly reduced the contribution of persons with disabilities to national development; hence, persons with disabilities are greatly disadvantaged and fully bear the brunt of the congestion in labour market system.

Research hypothesis Three: There is no statistically significant correlation between employers' undue focus on the disability and economic contribution to national development. The hypothesis testing and its analysis are done in Table 3 below.

Table 3: Pearson Product Moment Correlation Analysis of the Relationship between employers' undue focus on the disabilities and economic contribution to national development (N = 56)

Variables	**Mean**	**SD**	**ΣX^2 ΣY^2**	**ΣXY**	**Sig**	**R**
employers' undue focus on the disability	11.11	4.30	891.90			
economic contribution to national development	13.41	5.21	1571.41	579.02	0.002	0.59

$P < 0.05$ Degree of Freedom (df) = 54

The Table 3 revealed that employers' undue focus on the disability has a mean of 11.11 and Standard Deviation of 4.30 and economic contribution to national development has mean of 13.41and Standard Deviation of 5.21and is significant at $p < 0.05$ and produced a correlation coefficient of $r = 0.59$ at df of 54. This indicates that employers' undue focus on the disability has significant relationship with economic contribution to national development. Therefore, the null hypothesis was rejected. This shows that employers' undue focus on the disability without looking out for the potentials of persons with disabilities tend to reduce Gross Domestic Product of the nation; hence the wealth of potentials of these people is not tapped into leading to the current economic recession.

Discussion

The first hypothesis stated that there is no statistically significant correlation between social stigma against persons with disabilities in employment and economic contribution to national development. The findings of this hypothesis revealed that social stigma against persons with disabilities in employment have a statistical relationship with economic contribution to national development. The result is in agreement with the findings of Chukwuemake (2014) which affirmed that unfair treatment and discrimination against persons with disabilities at work took a variety of forms, such as inappropriate job placement, social distance, working hours, assessment of work performance or appraisal, underutilization of skills, underpayment. Several qualified applicants with better job credentials are denied the opportunity to contribute positively to economic development of the society because they have disability which may not significantly limit their functioning in such capacity. Nigeria as a third world country trailing in science and technological advancement as well as leadership forse ought to harness all human capital with diverse endowments in the development process. Leaving a category out of development plan by reason of disability is great loss the nation's Gross Domestic Product (GDP) as well as economic output.

Similarly, in support of the above findings, Handicapped International (2006) and State Service Commission (2002) affirmed that in some cases, workers with disabilities have been shunned and harassed by potential employers by reason of their disabilities. Many persons with disabilities are deprived of the opportunity to rescue the current recession in Nigeria economy which will ultimately defeat her quest for achievement of Vision 2020. Any economy that wants to boom in all facets of development, an inclusive approach to economic development is employed where nobody is left out in the development process but all initiatives are harnessed and valued for the purpose of ensuring massive economic growth. In the same vein, World Bank (2011) agreed that the lost productivity can result from insufficient accumulation of human capital (underinvestment in human capital), from a lack of employment, or from underemployment.

The second hypothesis of this study stated that there is no statistically significant correlation between Nigeria competitive labour market and economic contribution to national development. The findings revealed that there is a statistical relationship between Nigeria competitive labour market and economic contribution to national development. These findings are line with the work of Labidho and Ken (2009) supported that the employers of labour in Nigeria have now evolved a maze of biased criteria in which physical features have is used squeeze out those with disabilities from economic mainstream of the society. Consequently, job seekers with good resume are grossly denied access to work opportunities due to their disabilities, making it unrealizable for them to act as contributing members of the society. The authors further stated that this issue has sidelined great potentials from contributing adequately to the development of the national in a variety of facets of Nigeria economy. Nigeria annually graduates millions of people from universities into labour market, providing more people for limited job opportunities. People with disabilities are greatly disadvantaged in this regard addition to the fact that Nigeria is not yet a disability-minded nation. When people without disabilities are competitively in a consistent struggle for limited jobs what then is the hope of the minority population with disabilities. This makes their economic importance questionable by the general society because they are seen as burden to the government.

In corroboration, Hindo (2015) stated that the recent deep recession and its associated and still ongoing jobs crisis are likely to worsen labour market opportunities for people with disability. Due to the saturation in labour market system, persons with disabilities face more employment crises as some are retrench and replaced with more able-bodied persons without disabilities. This makes labour market system unfavourable and tend to waste the effort of the educated and propping many questions on the relevance of their certificates gotten from schools.

Conclusively, the third hypothesis states that there is no significant correlation between employers' undue focus on the disability and economic contribution to national development. The result of the findings showed that statistical relationship between employers' undue focus on the disability and economic contribution to national development. These findings agree with Deska and Ressir (2009), which supported that employers tend to have this erroneous assumption that employees with disabilities are likely under-perform in most professional areas of service delivery. The popular saying that "there is ability in disability" remains a factual truth in economic contribution of persons with disabilities. A disability affects ability in one area of functioning and not the whole physical and psychological functioning of a person. Such people may hold greater initiative and inventive ideas on the measures of propelling the economy of Nigeria to achieving vision 2020 and Sustainable Development Goals (SDGs). Mobilizing all human capital is critical to booming Nigeria economy to global recognition.

Conclusion

One of the critical ways in which citizens of a country contribute to economic development is through active participation in workforce. Thus, any group of people sidelined from workforce would constitute economic danger to the country thereby reducing its economic output. Nigeria is far from emerging as one of the 20 largest economies in the world and established itself as the giant of Africa due to one of these major reasons of excluding some human capital from actively partaking in economic development process of the country. Persons with disabilities in Nigeria face gross disadvantage in employment which is a setback to any propitious nation. A persistent exclusion of persons with disabilities from labor force constitutes a disadvantage to these people as well as the economy of Nigeria; hence, their inclusion in workforce would bring about economic marginal productivity particularly in this period of economic recession.

Recommendations

Based on the findings, recommendations are hereby made that:

- There should be enactment of laws which will favour employment of persons with disabilities in public and organized private sectors. In this regard, a specific percentage or quota should be allotted to the persons with disabilities. Similar laws are in operation in some developed countries; Nigeria should adopt such a law to give to these persons a pride of place in the society.

- The government should be committed to complying with the UNESCO's 5% quota on employment for person with disabilities to ensure an all encompassing policy that will favor not only employment of the persons with disabilities but also a conducive environment that will enhance mobility, accessibility and productivity. This policy should enforce compliance to universal design in all public and private buildings as well as conveniences. In addition, there should be walkways, special car parks, working materials, devices that will enhance their productivity in line with global best practices.
- Retributive sanctions should be meted out to any employer who deprive them access to work in their organizations by reason of disabilities. Such laws prohibit any employment discrimination against persons with disabilities.
- In order to promote inclusion and equality in employment, disability stakeholders should provide regular sensitization and awareness campaign on the need to promoting the rights of persons with disabilities and eliminating negative prejudices against persons with disabilities.
- Public and private buildings built with noncompliance to the principle of universal designs should retrofit necessary adapted and accommodating features to promote access and mobility of persons with disabilities to avoid firetrap.

References

[1] ADENOSIN, H. and TOCHUKWU, J. M. (2012). *Employment experiences and expectations of people with disabilities*. London: Office for Disability Issues.

[2] Australian disability and development consortium (2008). *A framework for disability within Australia's Aid Program. A draft report.* Retrieved on January 21, 2016 from http//www.usaid.gov/final-disability.

[3] BARI and KRIL (2007). *Understanding and utilizing diversity* (5th ed.). New Jersey: Pearson Education, Inc.

[4] BORINO, W. and HINDO, N. C. (2015). Why employers refuse to hire and retain workers with disabilities? Journal of Rehabilitation, 2 (21) 526–536.

[5] CHUKWUEMAKE, C. C. (2014). Employers' prejudices and empowerment of the disabled. *Disability & Society*, 2 (2) 123–126.

[6] Department for Work and Pensions (2006). *Economic and social costs and benefits to employers of retaining, recruiting and employing disabled people and/or people with health conditions or an injury: A review of the evidence*. Norwich: Her Majesty's Stationery Office.

[7] DESKA, A. S. and RESSIR, E. F. (2009). Analyzing and measuring social inclusion. Disability Rights Journal, 2 (5) 893–899.

[8] Equal Employment Opportunity Trust (2005). *Disability and employment – Review of Literature and Research.* Auckland: EEOT.

[9] European Commission, 2010). *European commission, guidance note on disability and development for European Union (eu) delegations and services*. Brussels: DG Development.

[10] GHIJI, F. S. and JIRUSALAM, J. (2013). Reflections from employers' perspectives on the disabled inclusion in workforce. Disability Rights Journal, 2 (2) 157–164.

[11] Handicap International (2006). Good Practices for the Economic Inclusion of People with Disabilities in Developing Countries Funding Mechanisms for Self-Employment. Retrieved from www.handicap-international.org in January 29, 2016.
[12] International Labour Office (2002). *Managing Disability in the Workplace*. Geneva: ILO.
[13] International Labour Organization (ILO) (2011). Disability in the workplace: Employers' organizations and Business Networks, Working Paper No 6, International Labour Organization. http://www.ilo.org/public/english/dialogue/actemp/downloads/publications/working_paper_n6.pdf.
[14] ITRE, A. D. and GALUO, C. B. (2001). *Three year strategic plan for Nigeria.* London: Leonard Cheshire Disability.
[15] JIRU, S. and LORRA, D. C. (2011). Discrimination is unfair: Disabled people's work experience in Nigeria. *Journal of Disability Issues. 3 (4),* 46–55.
[16] LABIDHO, H. and KEN, K. O. (2009). Inclusive economy, social inclusion and services for people with disabilities, The Disabled & Society. 9 (3), 195–207.
[17] METTS, H. M. (2004). *Disability and development background paper prepared for the disability and development research agenda meeting,* November 16, 2004, World Bank Headquarters, Washington, D.C.
[18] MURRAY, D. and HERON, C. C. (1999). Alternative employment and inclusion for disabled people. Disability in Workforce, 4 (6) 37–41.
[19] SMITH, J. (2004). Employers need to "change attitudes": disabled find it hard to get jobs, conference told', *Otago Daily Times*, 11 August 2004.
[20] State Service Commission 2002). *Statement of intent of the state service commission for 2006–2009.* Retrieved on January 29, 2016 from http: creativecommon.org/licence/by/3.0.
[21] United Nations Education Scientific and Cultural Organization (2006). Convention on right of persons with disabilities. New York: UNESCO.
[22] World Bank (2010). Disability and poverty in developing countries. Washington DC: World Bank.

(reviewed twice)

Mr. Orim, Samuel Orim
University of Calabar
Calabar
Zip code: 240212, Federal Housing, Calabar
Nigeria
e-mail: samuelorim1@gmail.com

The analysis of the speech and language therapy students' awareness to assessment and intervention of persons with symptomatic speech disorders – emphasis on autism spectrum disorders

(scientific paper)

Kateřina Vitásková

Abstract: *The article deals with an analysis focused on the expectations and attitudes to the diagnostics and intervention for people with symptomatic speech disorders, with an emphasis on the autism spectrum disorders, from the point of view of the education of students of speech and language therapy (logopaedics) as a part of the special education study programme. Special attention is paid to overlapping with the assessment of the pragmatic language level of communication and influencing it through speech and language therapy approaches. The connection with the modern concept of speech and language therapy in the pro-inclusive approach as well as in the context of preparation for collaborative transdisciplinary practice is discussed.*

Key words: *speech and language therapy, students, autism spectrum disorders, special needs education, undergraduate studies*

1 Introduction

Speech and language therapy (logopedics; SLT) represents a discipline focusing on human communication, its deficiencies, specifics, impairments or disorders. In contemporary comprehensive, global-holistic approach (viz např. Vitásková, 2013a) it should be considered as a profession dealing not only with people with impaired communication skills but with much more variable and diverse scope of practise, covering the issues of impaired communication skills in persons with disabilities as well people exceptionally gifted or talented, or their combinations. The main aim of SLT should be to develop, support and improve communication competence, which comprises conversational and interactive skills of the given individual, considered part of the pragmatic level of communication skills (e.g. Lesenciuc, & Codreanu, 2012; Lieberman, & Gamst, 2015; Vitásková, &Říhová, 2014).

Children, adolescents and adults with symptomatic speech disorders often experience problems at various language levels even in the pragmatics, which concerns the implementation of the communication intention, the making of a contact, the keeping alive of a conversation with the communication partner, the understanding of the sense of changing the communication partners in the conversation ("turn-taking"), etc. In this sphere, a significant role is played by non-verbal communication that is more significant to many professionals than verbal communication. Moreover, non-verbal communication may accentuate, complete, deny, regulate, control, repeat and replace verbal communication from the function perspective (DeVito, 2012; Vitásková, & Lechta, 2013).

Modern logopaedics is gradually becoming more interested in the pragmatic aspects of communication. The reason is a growing pressure for social competences and conversation skills both in the educational and professional environment, but also the changing paradigm of logopaedics from a purely practical articulatory phonetic mechanical approach to a higher degree of responsibility for the actual impact of the effectiveness of logopaedics care on the everyday understandability of both oral communication and non-verbal and co-verbal gestures. The approach reflects both the holistic approach of the modern logopaedics and the "post-emancipative" stage in the development of logopaedics in which the Czech logopaedics finds itself at present (Vitásková, 2013b). Speech and language therapists (SLTs) should look for new possibilities of assessing the interference of individual language levels in the communication intention in logopaedics, also emphasizing the inclusive trends in education and clinical therapy and consultancy (compare e.g. Vitásková, 2013c).

Disruption at pragmatic language level is typical not only in persons with disabilities within the so-called autism spectrum disorders (ASD, including the Asperger syndrome or high-functioning autism) but also in people with attention and activity disorders (ADD, ADHD), right-hemisphere deficits, or in persons with impaired communication skills due to negative socio-pathological phenomena, neglect, abuse, mental or sensory deprivation, or as a manifestation of the so-called nonverbal learning disabilities, etc. (Stemmer, 2015). But in case of individuals with ASD the pragmatic language level often plays a key role not only in diagnostics, but in intervention as well, due to the fact that it significantly interfere in assessment of crucial diagnostic markers, including communication behaviour, what serve as a criterion for evaluation of the success of specific therapies (Davies, CAndrés-Roqueta, & Frazier Norbury, 2014; Cummings, 2014).

The need to confront the views of SLT students on the assessment of clients with autism spectrum disorders (ASD) arose from the discussions and consultations held with both domestic and foreign professionals from different fields and from our recent research findings (Vitásková, & Říhová, 2014a; Vitásková, Říhová, & Šebková, 2015). Such discussions showed the differences between perceiving the terms pragmatics and pragmatic level of communication. Also, based on the results of the questionnaires realized in the first year of the GAČR project (see the acknowledgment) and their comparison with data obtained earlier from preliminary researches, we believe that one of the reasons of the fact that the assessment grade "insufficient" of communicative behaviour in clients with autism spectrum disorders is problematic is insufficiently realized practice of interdisciplinary cooperation. This cooperation might, in our opinion, severely endanger the efficiency and mainly the meaningfulness of assessing the pragmatics of communication especially in clients with such specific forms of symptomatic speech disorders that are part of the symptomatology picture of autism spectrum disorders. Based on the insight into the ideas, readiness and expectations of future speech and language therapists concerning their future role in ASD intervention, we have been trying to assess the suitability of diagnostic material being prepared and also to conceive the subsequent experimental verification in such a way that it would represent a material possible to seize specifically from the point of view of SLT, which would reflect the reality of SLT and special-needs-education practice. We were also interested in the areas of ASD intervention which the students consider to be saturated enough in their preparation and, on the contrary, in those which appear to be problematic from the point of view of diagnostics.

The aim of the paper is not to give a detailed description of the research, but rather to point out to the necessity of further, deeper research of the potential limits or risks in the education of speech therapists, preparing them for working with other than isolated types of communication abilities disorders so that their subsequent professional activities meet not only professional, but also ethical requirements. We would also like to point out to the necessity of creating such logopaedics diagnostic materials as will be able to capture certain insufficiently supported areas conditioning the external expressions of the pragmatic aspect of communication.

2 Speech and language therapy undergraduate studies in pro-inclusive approach

In the Czech Republic the **university study of speech and language therapy (logopaedy)** is implemented within the bachelor's and master's teaching and non-teaching special education study programmes at the faculties of education, mainly in fields preparing workers for the education sector (including counsellors). After passing the final speech and language therapy state examination (as for both, SLT special needs teachers and clinicians, the master degree is needed; see more Georgieva et al., 2014), the graduates of these programmes may work in the education sector (e.g.

logopaedic nursery and primary schools, special education centres, educational and psychological counselling facilities) and/or in the sector of social affairs (e.g. facilities providing social services, welfare institutions for children with disabilities, etc.).

A specific position belongs to the single-subject **non-structured non-teaching master's study of speech and language therapy** within the special education study programme at the Faculty of education, Palacky University in Olomouc, as it provides the best prerequisites for subsequent inclusion in the specialization training in the clinical sector. Graduates acquire professional qualification for special education work with persons with impaired communication skills of all age categories, including people with hearing impairment (emphasis on profiling graduates in the field of speech and language therapy and special needs education for people with hearing impairment, including sign language knowledge and communication skills).

2.2 Speech and language therapy in a pro-inclusive and collaborative approach

The prognosis for future development within the pro-inclusive approach to speech therapy intervention which, in our opinion, considerably depends on the attitudes and notions of speech therapy students about their future contribution to working with people with special needs and diverse settings. With this respect, we are mainly interested in the attitudes of students being primarily prepared in fields relating to the so-called clinical environment, which in some cases try to distance themselves from the issue of inclusion whereas their clientele may include individuals diagnosed with symptomatic speech disorders, i.e. with various forms of special needs. At the same time, their approach should be generally pro-inclusive. We agree with Hartman et al. (2012) that it is needed to form graduates who are able to engage reflexively and critically as socially responsive and who are competent to practise in diverse settings.

When dealing more closely with the situation at schools regarding the potential provision of SLT intervention, sppech and language therapist is the most frequently collaborating professional in the education process of children with special educational needs (SEN) compared to the number of all other pedagogical workers (16.4% at schools, 13.1% in nurseries) (Česká školní inspekce, 2014). When we move to the primary level of education, most of the schools ensure „screening“ (93.5%) of children with CD and recommend them professional diagnostics and professional treatment, what is a very promising strategy due to the pro-interdisciplinary approach. Nevertheless, SLT intervention by own employees is provided by 32.3% schools, externally by 14.2%, together with pedagogical-psychological counselling, especially by external psychologist (20.3% schools) (Česká školní inspekce, 2013). Schools actively recommend parents to visit an education counselling institution and it seems that the recommendations of those centres were consequently respected and followed. In the Czech Republic children with SEN represent 8.9% of all school children. A great number of these children are pupils with communication disorders, or specific speech, language and communication needs (Crichton, 2013) (approximately 0.40% pupils, not including specific learning disorders). At least 1.6 % of all of the rest applicants have possible symptomatic speech disorders based on Autism Spectrum Disorders (ASD) (0.41%). Further comparison of clinical SLT provided in the Czech Republic in recent years (summary of the data from 2012 and 2013, comparing them to 2002; ÚZIS ČR 2012; ÚZIS ČR 2013; 2014) shows that in 2012 and 2013 about 90 % clients registered in SLT facilities within the health-care resort were up to 18 years of age (94 % in 2002). Other diagnoses that could be considered are summarised in a single 8.2% category, including autism (on a slight increase) which could not be clearly identified (such as dysphagia, speech disorders associated with neurological disorders, CDs associated with intellectual disorders, voice disorders, dysarthria, aphasia, autism, cleft palate speech).

2.3 Speech and language therapists and autism spectrum disorders

Within the intervention of autism spectrum disorder, the role of speech and language therapist is defined at multiple level, mostly by various extent of participation and competences within screening, assessment, intervention, working with family, and counselling or consulting activities. Alongside, a comprehensive conception focusing not only the assessment of speech and language components, but also pragmatics in context of social skills and pragmatic language level is unavoidable (The Speech Pathology Australia, 2008). In recent years, this has been supported by a gradual implementation of the principles of new diagnostic criteria as a part of DSM V. and by the discussion about the diagnostics of social (pragmatic) communication disorders (see more e.g. Vitásková, & Říhová, 2014b).

Regarding the results of our research from 2014 a great majority of SLTs (N = 118; 67% of n = 177) in the Czech Republic (from educational, social, but mainly clinical institutions and practices) treat clients with ASD. Nevertheless, given the generally increasing prevalence of people with ASD (compare e.g. Buka, Viscidi, & Susser, 2014; Kim et al., 2014) and due to the importance of SLT for clients in all categories, and the overall communication deficits in ASD clients, we would expect even higher treatment ratio. The main age category of treatment is represented children between the ages 0–5 or children from 6 to 10 years-old. The majority of the SLTs reported the average number of their clients with ASD about 0 to10 (83.05%), mostly up to 5 (52.54 %) (see more Vitásková, & Říhová, 2015).

3 The methodology of the survey analysis

For the comparison of the partial results with the university students of undergraduate speech of the language therapy (SLT) programme awareness and approach to the ASD assessment and intervention we made the analysis based on the questionnaire survey. We present and discuss a brief summary of the partial outcomes of the survey, analysing the attitudes and notions of 38 students of the second to final (fifth) year of their SLT undergraduate studies based on the study programme Special education, but preparing mostly for future work in clinical (health) environment. We chose this group of students as the study program is nationally unique, comprehensive, with transdisciplinary cohesion with other study fields. Therefore, the students should respond to a questionnaire focused on ASD in relation to SLT and symptomatic speech disorders without any serious obstacles and with a basic knowledge and skills competence and relevant experience. The problematics of symptomatic speech disorders, including is one of the great part of their curriculum, as well the complex view of all language levels physiology and pathology issues.

For the purpose of analysis, we formulated the following research questions:
1. Is there a preference for working in the future with people with symptomatic speech disorders in the students of logopaedics studying in non-teacher study programmes?
2. On what language level would the students focus in people with autism spectrum disorders?
3. Do the student incline to future providing of their SLT intervention in the group of clients with ASD regarding their special needs basis?
4. For which segment of the diagnostics do the students feel to be prepared best?
5. What is the previous knowledge and awareness related to autism spectrum disorders of the students?
6. How the students perceive the importance and consequences of SLT intervention in ASD clients?
7. What are the students' expectations and subjective readiness for collaborative professional work with clients with ASD.

The questionnaire was designed as a set of 34 items type of structured, semi-structured and open that have been chosen for further additional qualitative analysis of selected partial response or for the possibility to express specific, individual attitudes and opinions of the students. We used Likert-scales (the response options were ordered in ascendant negative value) and semantic differential statements type of evaluations. The questionnaire was distributed online via group e-mail of the students, regarding the security and anonymity of the students. The estimated number of the students receiving the invitation to the research was 80. The return ratio was approximately 48% of addressed students; we emphasized the voluntary participation to receive only sincere and valuable responses. Then majority of respondents were from the final grade (fifth grade; 55.3%) and of second grade (18.4%). Exactly the same number of the students (13.2%) were students from the third and fourth grade. Therefore we may state, that the responses of the students reflected relatively more experienced views, with prospectively more knowledge and practical skills in special needs education and speech and language therapy area. Before entering the university and starting with their SLT undergraduate programme, 73.7 % of the students graduated at comprehensive schools, 13.2% on health services professional high schools, 10.5% Pedagogical lyceum, and one student is a graduate of a business school (2.6%). In other words, the majority of the students received rather general education focused on humanities, and mostly theoretically than practically oriented.

4 The partial results of the analysis and their discussion

The analysis of the confrontation of the SLT students with the problematics of ASD implies that they discussed the issue already during their high school studies and meet them even today relatively intensively, as nearly all students felt that the university courses introduce the issue "very often" or "often". Mostly positively can be perceived their great satisfaction with the fact that the problematics of ASD creates such a place in their study programme (94.7% together from all positive-like responses). Nevertheless, "very satisfied" with the fact were only 36.8 % of all these students. Two students were "definitely not satisfied" with so frequent ASD related issues emerging during their undergraduate studies.

The majority (81.6%) of students expressed a rather indifferent, neutral, mean level of their voluntary interest in working with ASD clients or a directly active participation in voluntary work (mean scale value 2.8 out of 4). However, after their graduation none of the students tend to be involved in the practise with clients with ASD "on a daily basis", on the other hand, 73.7% of the students would rather not be involved and 15.8% of them "definitely not" (mean scale value was 3.1 of 4).

As to the preferred language ability levels in the process of the assessment in clients with ASD, the students would mostly concentrate on the assessment of pragmatic language level (the mean value 5.5 out of 6) and vocabulary (the mean value 4.7 out of 6). The pronunciation (articulation) and the development of grammatical-syntactic level are perceived as being less important in diagnostics (the mean scale value 3.4 out of 6 optional in both). Only one student add particularly social skills development and family environment. The qualitative analysis of the responses shows a positive interest of the students in supplementing the responses with their comments reflecting an adequate understanding of the significance of the pragmatic aspect of communication both from the point of view of social communication and the functionality of communication, emphasizing the possibility for the clients to express their needs through the pragmatic language level. On the other hand, we may notice that often the diagnostics is confused with intervention, however, that may be the result of stressing the principle of the diagnostic therapy in education, mainly in clients in whom a protracted diagnostic process lasting for several months, even years, may be anticipated. One student even speaks about inadequate focus on the articulation or the syntactic level being a „cosmetic problem“ in autism.

The order of the accentuated language levels the future SLT therapy preferences is similar; the students would mostly concentrate on pragmatic language level (the mean value is 4.8 out of 5), than to lexical-semantical (the mean value is 3.7 out of 5) and phonetic-phonological (pronunciation) (the mean value is 2.9 out of 5) and as the least important they elected morphological-syntactical level (the mean value is 2.7 out of 5 optional). Similar to diagnostics, the qualitative analysis shows an apparent emphasis on the positive impact of the intervention in the pragmatics on the area of socialisation, expressing one‘s emotions, needs, but at the same time it is interesting that there are references to the problematic side of the pragmatics of communication in ASD clients as a motif of the primary focus on that in the logopaedic intervention.

Specifying the particular therapy focus (Figure 1), the students would directly intervene the pragmatic communication (the mean value is 5.7 out of 7 optional and would use alternative and augmentative communication as a communication tool and support (the mean value is 4.4 out of 7 optional).

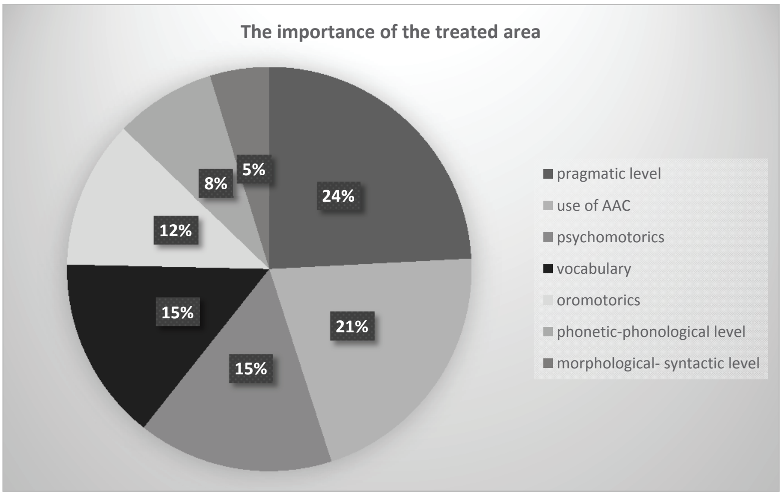


Figure 1: The importance of treated area from the perspective of SLT students

However, if we look more specifically on the particular parts of pragmatic language level assessment (see Table 1), the students tend to be more confident on their abilities to assess communication expressions related to verbal or vocal expressive language behaviour, phonation, acoustic gnosis and visual contact and, surprisingly, oromotorics (with the highest self-confidence), as the assessment of oromotorics in ASD is very complicated due to their impaired or inhibit ability to imitate (see e.g. Fabbri-Destro, Gizzonio, Avanzini, 2013). But the assessment of proxemics is the least to what students feel their confidence or expertize. We consider this finding to be very important for future adaptations or partial specification of assessment tools and process of individual diagnostics, but regarding the

Table 1: The preferences of assessment areas from the perspective of SLT students

ASSESSMENT AREA	Without difficulties, I know exactly the how to assess and registrate	With slight difficulties, hesitation, but I know how to assess	With difficulty, I am not familiar with the assess method much	Not at all
visual (eye) contact	10	14	10	4
proxemics	2	7	23	6
facial expression in emotional way	5	14	15	4
gesticulation and its conversational meaning (the expression of agreement, disagreement, request)	9	12	16	1
voice prosody and its conversational meaning (the expression of agreement, disagreement, request)	9	9	18	2
vocalization	5	11	16	6
changes of conversational roles	7	12	13	6
joint attention	5	10	15	8
oromotorics	15	15	6	2
acoustic gnosis	11	11	10	6

orofacial muscles activity	7	15	11	5
tactile perception (haptics) – its hyper- or hyposensitivty	2	13	17	6
oral gnosis/stereognosis	5	9	18	6
phonation	11	18	5	4

Regarding future tendencies on working with SEN clients, the students prefer work with isolated, monosymptomatic type of single form of impaired communication ability or working with clients with hearing impairment in their professional future. This tendency is understandable, because the student's second main specialization profiling is in hearing impairment and deaf studies. The preference of working mostly with clients with ASD was expressed at the very low level (the mean value only 1.9 out of 14 optional scale degrees). Even twice as much they tend to work with clients with Down Syndrome, and even 3 times more with clients with intellectual disabilities – this fact is at least surprising, needing further deeper, maybe more qualitatively oriented analysis and discussion. The explanation is maybe connected to the students' statements expressing their concern about the ASD clients' uneasily understandable behaviour, which is sometimes even connected to their inner "fear" and complicated for immediate comprehension communication expressions (15.2%), or the perspective of very demanding and difficult work and the image of not so "pleasant" or not so "exciting" work from their point of view. In their supplementary comments they also revealed that they are not sure in terms of their specific practical skills in ASD – they appreciate the level of their theoretical knowledge, but at the same time express the uncertainty in providing assessment and intervention by themselves, because of the limited opportunity to directly work with different clients with ASD. On the other hand, this fact support our positive estimation of students awareness to individual variability of ASD diagnose and its heterogeneous symptomatology.

Regarding their expectations on working with clients with ASD, the students expect that SLTs working in education settings mostly concerned intervention of ASD clients or social care institutions. Nevertheles, we found more clients with ASD in the practise of SLTs working in clinical settings (Vitásková, & Říhová, 2014). They assume that as SLTs they will mostly work with ASD clients with profound and moderate disability and communication difficulties in both, verbal and nonverbal communication, or with related intellectual disabilities, representing 48% of the students. Based on the current state of art and SLT practise in the Czech Republic situation they also consider ASD clients as those with "child autism" (6 out of 8 scale grades) and "autism with intellectual disability" (4.4 out of 8 scale grades) and "Asperger syndrome" (3.9

out of 6 scale grades) as the most frequent group of SLTs' clients with ASD. Their attitudes to future collaborative work revealed that the students would like mostly to cooperate with parents and families of clients with ASD (the importance has the value of 14.6 out of 18 optional – that means 82% of all students) and clinical psychologists, special needs educators and school psychologists (13.8. and 12.9, what represent 78% and 72 % of all students). As a very positive result we must perceive the highly preferred future cooperation with school speech and language therapists (11.1%). Surprising, but also in a positive way, is the higher inclination to possible professional collaboration with teachers (in nursery, primary and grammar schools) comparing the number with the cooperation preferences of graduated SLTs (only 3 out of 177 SLTs), which is really alarming and calling for maybe better and more intensive building of collaborative work of SLTs towards educational and teaching environment.

Regarding the question of readiness for working with SEN clients with other than CD very interesting and needed further analysis is the fact, that the students' self-estimation of their preparedness to the interdisciplinary work with other professionals is rather low (47.8%) and 13.2% of the students consider themselves totally unprepared for the interdisciplinary cooperation. A bit more positive, but still quite not satisfactory, is their evaluation of readiness for work with families and parents – 52.6% of the students feel as "ready" and 10.5% "completely ready". On the other hand, 36.9% of the students feel as "unprepared" and 5.3% "completely unprepared". For all of them is the cooperation with families in treating ASD clients "essential", but rather "difficult" (52.6%) or even "very difficult" (13.2%).

5 Conclusion

Based on the partial results (more detailed partial results are being published continuously) we can state that, as far as the preferred language level is concerned, the students would rather focus on the assessment (diagnostics) of the pragmatic language level, the same as in the logopaedics intervention, namely, among others, by supporting alternative and augmentative communication, paradoxically focusing on one of the most complicated areas of logopaedics diagnostics and practice in ASD clients, which is orofacial praxia. In comparison to the results of research surveys already presented focusing on the professional preferences and approaches of speech therapists in practice, we find the same orientation, even though the students are much more inclined towards collaborative practice with the family and teachers rather than with other clinical speech therapists. We regard those findings as significant in view of the necessity of assessing the pragmatic language level also in the context of its quality of specific features, as the pragmatics are usually assessed e.g.

in children with ASD mainly based on the assessment of the parents or the teachers, and also for the, in our opinion, indispensable future interconnection of the diagnostics of the pragmatic level with its confrontation with the pragmatic production or parent perception.

Based on the insight into the ideas, preparedness and expectations concerning their future role in the intervention in ASD of the future speech therapists, we were trying, inter-alia, to assess the suitability of the diagnostic material being prepared for the area of the pragmatic level of communication, as well as to outline a subsequent experimental verification so that the material may be grasped from the specific point of view of logopaedics, reflecting the reality of the practice of logopaedics and special education. It is essential to utilise the higher confidence of the students in their own competences in evaluating the orofacial movements and auditory gnosia. On the contrary, in practical education more attention will have to be paid to the diagnostics of proxemics in the diagnostics of which the students of logopaedics perceive their greatest deficiencies. We have to view critically the qualitatively analysed additional comments of the students pointing to their insecurity in the specific interconnection of the theoretical knowledge with direct practical intervention, which is rather limited, namely in the clients with ASD, as the direct work is complicated by the inventory and intensity of symptoms in individual clients.

Future SLT graduates need to be informed about the new conditions stemming from the actual requirements of the day-to-day practise characterized by considerable heterogeneity and diversity (Lechta et al., 2011a). In this context, we consider as positive and beneficial that SLT has had a long-term tradition in the Czech Republic and the Slovak Republic, with strong relation to the propaedeutic subjects of the medical, healthcare, psychological, general education, sociological and linguistic spheres.

Acknowledgements
The paper is based on the partial outcomes of the research project „Pragmatic language level in individuals with Autism Spectrum Disorders“ supported by the Czech Science Foundation (GAČR) (No.:14-31457S, 2014/2016, researcher: Vitásková).

References

[1] BUKA, S. L., VISCIDI, E. W., & SUSSER, E. S. (2014). Epidemiology of Psychiatric Disorders. In *Handbook of Epidemiology*, New York. 2389–2427.

[2] ČESKÁ ŠKOLNÍ INSPEKCE. *Výroční zpráva České školní inspekce za školní rok 2011/2012,* Praha 2013, Available at: http://www.csicr.cz/getattachment/e1b96137-2102-4a87-8cae-7384d9dba60c.

[3] ČESKÁ ŠKOLNÍ INSPEKCE, *Výroční zpráva České školní inspekce za školní rok 2013/2014,* Praha 2014, Available at: http://www.csicr.cz/getattachment/dd56770f-2211-42bf-92d3-8265b8cb3530.

[4] CRICHTON, S. (2013). Understanding, identifying and supporting speech, language and communication needs in children. *Community Practitioner: the Journal of the Community Practitioners'& Health*. 86(12), 44–7.

[5] CUMMINGS, L. (2014). *Pragmatic Disorders*. Dordrecht: Springer.

[6] DAVIES, C., ANDRÉS-ROQUETA, C., & FRAZIER NORBURY, C. (2016). Referring expressions and structural language abilities in children with specific language impairment: A pragmatic tolerance account. *Journal of Experimental Child Psychology.* 144, 98–113, ISSN 0022-0965, http://dx.doi.org/10.1016/j.jecp.2015.11.011.http://www.sciencedirect.com/science/article/pii/S0022096515002866).

[7] DE VITO, J. A. (2012).*The Interpersonal Communication Book*. 13th ed. Pearson.

[8] FABBRI-DESTRO, M., GIZZONIO, V., & AVANZINI, P. (2013). Autism, motor dysfunctions and mirror mechanism. *Clinical Neuropsychiatry*, 10, 177–187.

[9] FELCMANOVÁ, L., KLUSÁČEK, J., & HRSTKA, D. (2014). *Počty dětí se speciálními vzdělávacími potřebami v základním školství v ČR 2014. Analýza dostupných statistických dat.* Olomouc: Univerzita Palackého v Olomouci. Available at:http://inkluze.upol.cz/ebooks/analyza/analyza-08.pdf.

[10] GEORGIEVA, D., WOŹNIAK, T., TOPBAŞ, S., VITASKOVA, K., VUKOVIC, M., ZEMVA, N., & DURANOVIC, M. (2014). Education of Speech and Language Therapists/Logopedists in Selected Central and Southeastern European Countries: Challenges and New Horizons. In: *Folia Phoniatrica et Logopedica*. 66, 183–196.

[11] HARTMAN, N., KATHARD, H., PEREZ, G., REID, S., IRLAM, J., GUNSTON, G, JANSE VAN RENSBURG, V., BURCH, V., DUNCAN, M., HELLENBERG, D., VAN ROOYEN, I., SMOUSE, M., SIKAKANA, C., BADENHORST, E., & IGE, B. Health Sciences undergraduate education at the University of Cape Town: A story of transformation. SAMJ, S. Afr. med. j. [online]. 102(6), [cited 2016-03-18], 477–480 . Available from <http://www.samj.org.za/index.php/samj/article/view/5680/4230>. doi:10.7196/SAMJ.5680.

[12] KIM, Y. S., FOMBONNE, E., KOH, Y., KIM, S., CHEON, K., & LEVENTHAL, B. L. (2014). New research: A Comparison of DSM-IV Pervasive Developmental Disorder and DSM-5 Autism Spectrum Disorder Prevalence in an Epidemiologic Sample. In: *Journal Of The American Academy Of Child & Adolescent Psychiatry*, 53, 500–508.

[13] LESENCIUC, A., & CODREANU, A. (2012). Interpersonal communication competence: cultural underpinnings. *Journal of Defense Resource Management*, 3, 1 (4).

[14] LIEBERMAN', D. A., & GAMST, G. (2015). Intercultural communication competence revisited: Linking the intercultural and multicultural fields. *International Journal of Intercultural Relations*. 48, 17–19. doi:10.1016/j.ijintrel.2015.03.007.

[15] ŘÍHOVÁ, A. VITÁSKOVÁ, K., & ŠEBKOVÁ, L. (2015). *Možnosti diagnostiky pragmatické jazykové roviny u osob s poruchami autistického spektra*. In MAIEROVÁ, E. A KOL. (Eds.) *PHD EXISTENCE 2015 Česko-slovenská psychologická konference (nejen) pro doktorandy a o doktorandech*. 55–64. WOS:000362513500005. Dostupné: http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=14&SID=X1zNIEvv7CJDgwm7fKb&page=1&doc=1.

[16] Speech Pathology Australia. (2008). *The role and responsibility of speech pathologists in assessing, diagnosing and treating clients with Autism.* The Speech Pathology Australia, 2008. [online]. Available at: http://www.speechpathologyaustralia.org.au/library/position_statements/Autism_role_of_sp.pdf.

[17] STEMMER, B. (2015) Pragmatic Disorders, In International Encyclopedia of the Social & Behavioral Sciences. 2nd ed. 788–794. http://dx.doi.org/10.1016/B978-0-08-097086-8.54027-6.

[18] ÚZIS ČR (2015). *Activity of health establishments in selected branches of health care*. Praha: ÚZIS 2015.

[19] ÚZIS ČR (2012), *Activity of Speech and Language Therapy in the Czech Republic in 2011. Aktuální informace č. 18/2012*, 2012 [cit. July,12,2013]. Available at: http://www.uzis.cz/category/tematicke-rady/zdravotnicka-statistika/logopedie?page=1.

[20] ÚZIS ČR (2013) *Activity of Speech and Language Therapy in the Czech Republic in 2012. Aktuální informace č. 17/2013*, 2013 [cit. August, 2th, 2013]. Available at: http://www.uzis.cz/category/tematicke-rady/zdravotnicka-statistika/logopedie?page=1.

[21] ÚZIS ČR. *Activity of Speech and Language Therapy in the Czech Republic in 2013. Aktuální informace č. 13/2014,* 2014 Available at: http://www.uzis.cz/category/tematicke-rady/zdravotnicka-statistika/logopedie?page=1.

[22] VITÁSKOVÁ, K. (2013a) *Special Education of Individuals with Communication Disorders.* Olomouc: Univerzita Palackého v Olomouci.

[23] VITÁSKOVÁ, K. (2013b) Contemporary view on initial university preparation of speech language therapists in the perspective of inclusive environment and symptomatic speech disorders. In *ICERI2013 Proceedings*. Proceedings.4285–4293.

[24] VITÁSKOVÁ, K. (2013c). Školsko-politický komponent inkluzívnej pedagogiky. In LECHTA, V. a kol. *Inkluzívna pedagogika a jej komponenty.* Trnava: Typi Universitates Tyrnaviensis. 158–175.

[25] VITÁSKOVÁ, K. & LECHTA, V. (2014). Wissenschaftliche Kooperationen zwischen der Tschechischen und Slowakischen Republik – dargestellt am Beispiel der Erforschung Symptomatischer Sprachstörungen und Inklusion. In LEONHARDT, A., MÜLLER, K. & TRUCKENBRODT, T. (Eds.), *Die UN-Behindertenrechtskonvention und ihre Umsetzung. Beiträge zur Interkulturellen und International vergleichenden Heil- und Sonderpädagogik.* Bad Heilbrunn: Klinkhardt. 90–103.

[26] VITÁSKOVÁ, K., & ŘÍHOVÁ, A. (2014a). Trans-disciplinary Cooperation in Children with Autism Spectrum Disorder Intervention with Emphasis on the Speech and Language Therapist's Important Role. In *Procedia – Social and Behavioral Sciences.* Volume 132(15), 310–317, http://dx.doi.org/10.1016/j.sbspro.2014.04.315.

[27] VITÁSKOVÁ, K., & ŘÍHOVÁ, A. (2014b). Interdisciplinární kooperace u osob s poruchami autistického spektra s akcentem na roli logopeda a intencí na pragmatickou jazykovou rovinu. In. *Jinakost ve speciálněpedagogickém procesu.* 189–197.

[28] VITÁSKOVÁ, K., & ŘÍHOVÁ, A. (2015). Speech and language therapy in the context of autism spectrum disorders assessment and intervention – professional undergraduate and graduate approach. In *ICERI2015 Proceedings*. Madrid: International Association of Technology, Education and Development (IATED), 4484–4491.

(reviewed twice)

doc. Mgr. Kateřina Vitásková, Ph.D.
Palacký University
Žižkovo nám. 5
77140, Olomouc
Czech Republic
e-mail: katerina.vitaskova@upol.cz

A practical guide for conducting qualitative research with grounded theory

Corbin, J., & Strauss, A. (2014). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage publications. ISBN 978-1-4129-9746-1

(book review)

Reviewed by Yuntong Peng

Grounded theory, a theory development approach in qualitative research, has become increasingly popular in recent years. In contrast to a deductive approach to theory development, grounded theory researchers employ an inductive way of theory development that is grounded in data systematically gathered and analyzed (Anderson & Arsenault, 2005). Grounded theory most often stems from qualitative data sources (Birks & Mills, 2011); various types of data sources can be used, such as interviews, observations, videos, journals, diaries, drawings, internal documents and so on (Corbin & Strauss, 2015). A grounded theory study can be applied to identify general concepts, to develop theoretical explanations and to offer new insights into various experience and phenomena (Corbin & Strauss, 2015).

Tracing back to the source, grounded theory was first developed by Anselm Strauss and Barney Glaser during their collaboration in researching the dying experience of hospital patients. In 1967, they published *The discovery of grounded theory*, which leads to the later prominence of the grounded theory. Among the collection of books on grounded theory, *Basics of qualitative research: Techniques and procedures for developing grounded theory* written by Anselm Strauss and Juliet Corbin remains classic. Since the first publication in 1990, this book has been revised for several times, with the basics remaining the same.

Now in 2015, here comes the forth edition, *Basics of qualitative research: Techniques and procedures for developing grounded theory (4th edition),* the latest and most updated one. Within this edition, the book has been revised to be more easily understandable to beginners. Each chapter has been re-examined and added with new headings and additional examples. Some of the denser chapters have been split apart to make each chapter more focused and understandable. Meanwhile, "Insider insights" has been added to some chapters as a new section which provides readers with experiences and viewpoints from other grounded theorists.

The book consists of three parts. **Part one** (Chapter 1–11) comprehensively includes all the important information about grounded theory and essential steps and techniques to conduct grounded theory research. It covers background information, theoretical foundations, important concepts, ethical issues, and steps from data collection, theoretical sampling, data analysis to integration, as well as important techniques such as writing memos and diagramming. With the procedures and techniques introduced, in **part two** (chapter 12–16), by using their Vietnam war experience research data, the authors focus on demonstrating the application of those procedures and techniques to analyze different types of data. Therefore, the abstract explanations of methods can be connected to actual analysis; just because of this, the authors also suggest readers to read the second part together with the first part. As for the **third part** (Chapter 17–19), it provides advice about writing theses, monographs, and dissertations, presenting the research and evaluating the quality of the studies. It also offers answers to questions asked by students and other grounded theory researchers. With all the comprehensive and practical information included, just as stated by the authors, they hoped to make this book "teachers-mentors in absentia".

As a beginner who wants to apply grounded theory in my own research, I have found this book very helpful. **Firstly**, it introduces the background information and theoretical foundations of grounded theory, which provides the readers with a better position to understand grounded theory within the broader context of scientific research and also to distinguish grounded theory research with other qualitative research. **Secondly**, it offers very comprehensive and practical guidelines for conducting a grounded theory study, from the very beginning – choosing a research problem, to framing research questions, writing proposals, data collection and analysis, theory integration, and to the final steps, writing and presenting the research results. With explicit explanation and various examples, the authors make the complicated process easily understandable. **Besides**, numerous resources and links are provided at the end of each chapter to support my further reading.

Noteworthily, although the authors have provided very clear and elaborative steps for researchers to follow while conducting a grounded theory study, they still emphasize the importance of the researchers' development of independent thinking as well as the art of interpretation. They point out that the researchers should not be obsessed with the set of procedures, and that this book provides techniques and procedures that can be used as tools but not directives. The qualitative analysis process should be of fluid and dynamic nature and be driven by insight gained through interaction with data. Therefore, the authors stated that this book is less about a specific methodology and more about teaching persons how to think more self-consciously and systematically about data.

Overall, this book is a very practical guide for conducting qualitative research with a grounded theory approach. Students or researchers who are interested in carrying out grounded theory studies can benefit from it. I would definitely recommend this book.

References

[1] ANDERSON, G., & ARSENAULT, N. (2005). *Fundamentals of educational research (2nd ed.)*. Philadelphia, PA: Taylor & Francis e-Library.

[2] BIRKS, M., & MILLS, J. (2011). *Grounded theory: A practical guide*. Sage publications.

[3] CORBIN, J., & STRAUSS, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.

Yuntong Peng
Department of Special Education
Faculty of Education
Chengdu University
Shiling Town, Chengdu City 610106
China

Child with mental disabilities and support of their development

BAZALOVÁ, Barbora. *Dítě s mentálním postižením a podpora jeho vývoje.* 1. vyd.
Praha: Portál, 2014. ISBN 978-80-262-0693-4.

(book review)

Reviewed by Martina Hubištová

In every society, we hardly find two of the same individual. Each person is an individual with unmistakable personality traits and characteristics. In this regard, no person with disabilities is an exception.

Birth of a child with mental disabilities represents a difficult life situation for parents. Parents who were expecting the birth of a healthy child, creating a vision of the future, are suddenly facing many unsatisfactorily answered questions related to the future of their disabled child.

The book is a great help not only for parents of disabled children. It offers readers, and especially parents,current theoretical knowledge about mental disability. All findings are supplemented by the results of researches, case studies, practical experience, and insights of experts and parents. Much of the book is devoted mainly to information on how you can support the development of children with mental disabilities the best.

The book includes the topics which, according to the author of the monograph, parents of children with intellectual disabilities should encounter such as:

- the status of the family in society,
- the phase of coping with the birth of a disabled child,
- siblings of children with mental disabilities,
- inclusive education.

The author is also dedicated to specific practical problems including e.g.:

- a game of a child with mental retardation,
- socialization,
- adaptation,
- development of self-care,

- development of communication skills,
- visual and auditory perception, etc.

The book was published in 2014. Its author, Barbora Bazalová, is a docent at the Department of Special Education of the Faculty of Education at the Masaryk University in Brno, a special pedagogue and author of a range of articles and publications in the field of special education.

The publication is divided into five major chapters providing a general and brief knowledge overview about the problems of mental disability and a countless of case studies.

In the first chapter, we are introduced to the terminology of mental disabilities, syndromes associated with mental retardation (Down Syndrome, Prader – Willi Syndrome, Williams Syndrome etc.) and autism spectrum disorders. Mental disability can take many forms. Mental disability is seen as a term encompassing a variety of intellectual deficits, including light deficiency, which cannot yet been described as mental retardation, comprising of cases of brain damage in the postnatal period and diseases like dementia. Emphasis is placed on the proper use of terminology. Special attention is devoted to autism spectrum disorders. The recent period has seen an increase in the incidence of autism spectrum disorders worldwide. It is a spectrum of disorders in each individual manifestsitself in various forms and changes over time.

The second chapter discusses the diagnosis, development and support of disabled child. Some types of mental disability can be diagnosed as early as the prenatal period starts, before the birth of a child. If you know what to look for, detection is relatively simple. Diagnosing a child with mental disabilities is very important. If we know in which area the child has a problem, what the child needs, it is possible to apply an early intervention. The method of intervention is chosen with regard to the prognosis, possibilities of family and the region. In the development of various areas of children with intellectual disabilities it is always good to bear in mind that they need to experience success and they need to feel that they are good at something and that they can be successful. We should offer them an intense sensory perceptions and demands that should correspond to the mental level of children and their enhanced fatigue. Great emphasis should be placed on creating social habits, independence and adaptation strengthening.

The next chapter presents the basic topics in the lives of families with children with mental disabilities. The family receives a different social identity, there may be changes in the organization of family life, it can change the economic situation of the family, etc. Parents are not often prepared for the birth of a child with a disability and when they are informed about a diagnosis they need a psychological help. Great part of the chapter is also devoted to siblings of children with mental disabilities, who are often exposed to great psychological strain. However, if you choose the right educational forces, the situation does not need to represent such a big psychological strain, it prepares them for life and makes them stronger.

The fourth chapter presents therapeutic intervention for children with intellectual and multiple disabilities or children with autism spectrum disorder. When selecting interventions, it is important to take into account the specifics of disability and individual peculiarities of the child.

The last chapter deals with the education of children and pupils with mental disabilities. The right to education is one of the fundamental human rights and there should be no differences relating to all of the citizens of our state. The author believes that inclusion is not for everyone and the situation always needs to be assessed individually. The basic rules for integration include e.g. education of participants, change of attitudes, willingness, financial support (of state, countries, and cities), legislative support, individual approach, teacher‘s assistant, etc.

At the end, there are few recommendations that parents can follow after the birth of a child with mental disabilities. The author emphasizes the importance of an individual approach, cooperation with all professionals working with the child, and of course, the importance of proper and timely intervention in the early life of a child with mental disabilities. This right and timely intervention determines the future development of the child and indeed the life of the whole family. Possibilities of the brain in the early stages of a child enable the development of compensatory mechanisms that are in some areas problematic. However, if the devotion to the child during this period is poor, neglected, the potential for further development of a child with mental disabilities is often reduced, sometimes even impossible.

Mgr. Martina Hubištová
Institute of Special Education Studies
Faculty of Education
Palacký University
Žižkovo nám. 5
771 40 Olomouc
Czech Republic
e-mail: Hubistova.M@seznam.cz

Information for authors

Basic information about the JEP

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

Journal of Exceptional People (JEP) will provide research studies and articles on special education of exceptional people. This area covers individuals with disabilities and, on the other hand, gifted persons. The *Journal* will focus on publishing studies and articles in the field of education, social science (sociology) and psychology, special thematic issues and critical commentaries. The publishing language of the *Journal of Exceptional People* is to be English exclusively.

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

Instructions for authors

Scope of the article is strictly given – must not be more than **10 pages** formatted according template (including list of references, images, tables and appendices). The body of the text shall be written in letters of Times New Roman size 11 b. Different styles are undesirable, use the normal template and also please avoid numbering of pages. The final version of the articles ought to be formatted to the paragraphs. The Editorial Board reserves the right to refuse contributions.

The file should be saved under the same name with the surname of first author and sent in a format with the extension .doc or .docx (MS Word 2007 and upper versions). Before sending a file with the paper it is required to scan for possible infections or viruses. Authors are responsible for content and linguistic aspects of the contributions. Please, do not number pages. Images, graphs and tables should be numbered according to the example (***Figure 1:*** *Preparatory exercise* [Times New Roman 11 b, italics]).

It is highly recommended to spend the necessary time correcting the paper – every mistake will be multiplied. Posted papers unsuitable for printing will not be published! Ensure appropriate division and balance between the various parts of the contribution and aesthetic placement of pictures and diagrams as well as their quality. Terminological correctness and formality are required.

Please note that publication of papers in the Journal will be free of charge.

Section headings should be numbered and written, as described in following manual: standard signs, symbols and abbreviations are to be used only. Monosyllabic preposition are ought not to figure at the end of the line, but at the beginning of the next line – they can be shifted using the "hard returns" CTRL + SHIFT + SPACE.

The list of literature and references to resources ought to follow these norms and directives: ČSN ISO 690 and ČSN ISO 690-2 or Publication Manual of the American Psychological Association APA.

Completed contribution shall be sent in electronic form to the mail address: **dan.bibaged@centrum.cz**. In the subject line of the email note: JEP – contribution.

Compliance with publication ethics

JEP editorial board ensures compliance with publication ethics and does this in a following way:

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

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

The criterion relating to the quality of articles

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

- Does the text have clear conclusions?

Formal criteria:

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

Recommendations – Editors conclusions

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