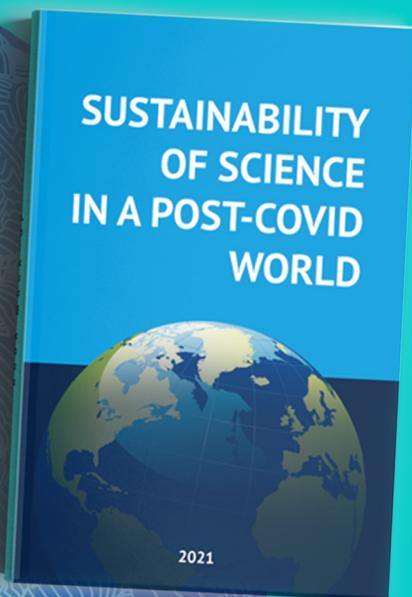
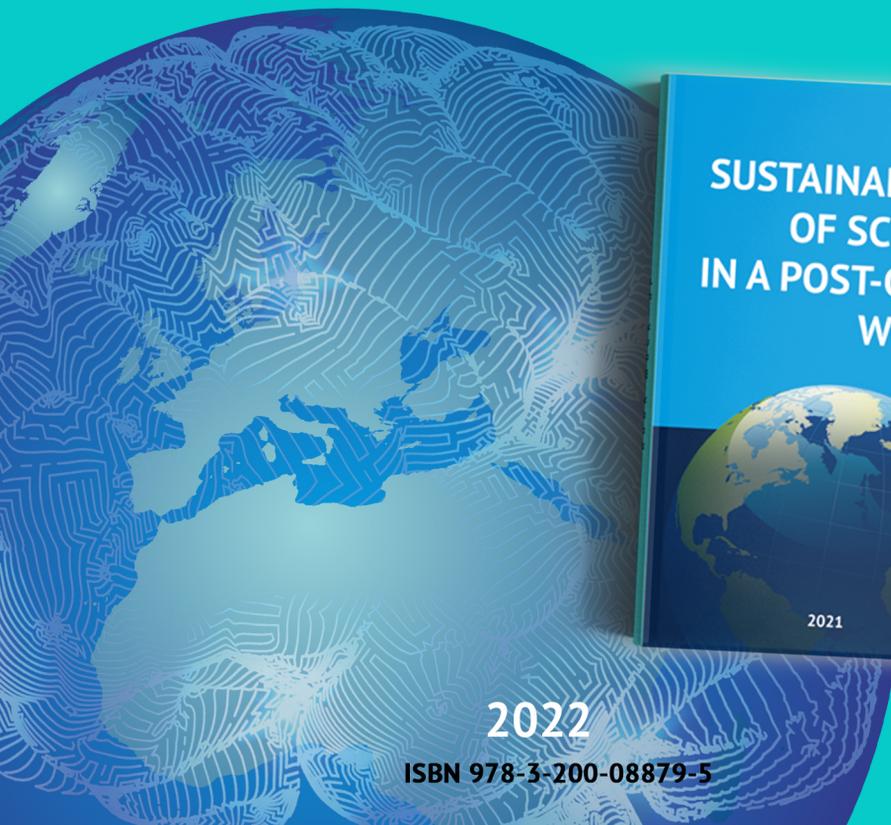


UNIVERSITY AND INSTITUTIONAL SCIENTIFIC RESEARCH



2022

ISBN 978-3-200-08879-5

UNIVERSITY AND INSTITUTIONAL SCIENTIFIC RESEARCH

2022

University and institutional scientific research: Collective monograph

ISBN 978-3-200-08879-5 (e-book)

Editors:

Prof. DDr.Sc. Irene Sibgatullina-Denis, Austria

Prof. DDr.Sc. Alica Vančová, Slovakia

Dr. Susanne Blumesberger, MSc, Austria

Reviewers:

Dr.Sc. Olga Edwards, United Kingdom

Univ. PhD Arthur Seibgl, MA, PSU, USA

Publisher:

IfII Institut für Intellektuelle Integration

Skodagasse 7, Top 7

1080 Vienna, Austria

office@rbs-ifie.at

© 2022 by IfII Institut für Intellektuelle Integration

© The Editor(s) (if applicable) and The Author(s)

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in institutional affiliations. The authors alone are responsible for the views expressed in this publication.

ISBN 978-3-200-08879-5

For citation: Sibgatullina-Denis I., Vančová A., Blumesberger S., editors. University and institutional scientific research: Collective monograph. Vienna: IfII Institut für Intellektuelle Integration, 2022. 472 p.

CONTENTS

Politics forge borders, education and science dismantles them 6
Oskar Raif. Riabov

Editors' Foreword 7
Irene Sibgatullina-Denis, Alica Vančová, Susanne Blumesberger

Chapter 1 University and institutional scientific research: Inclusion and Integration

Inclusive education of pupils with special educational needs from the perspective of research studies 10
Miroslava Bartoňová

Transformation of the system of special education counselling in Slovakia over more than thirty years with emphasis on the current change in the counselling system 18
Alexandra Biščo Kastelová

Behavioral disorders among pupils in special primary schools and options for eliminating them 28
Ondrej Čapák, Michaela Čapáková

Selected aspects of the quality of life of individuals with oncological disease in contexts of special pedagogy 47
Terézia Harčaričková, Zuzana Ivanová

The impact of cystic fibrosis on the family of an individual with this disease 60
Katarína Kelemenová, Terézia Harčaričková

Orientation and mobility of seniors with visual impairment – results of research 71
Jana Lopúchová, Žofia Ondráčková

Development of specific skills in children with autism spectrum disorders in the educational process 88
Lenka Nadányi

The impact of music on the life quality of hearing impaired101
Margaréta Osvaldová, Miroslava Tomášková

Counselling for the LGBTI Community in the Slovak Republic and abroad ...120
Dorota Smetanová, Mona Hillis

Familiäre Störungen – ihre Auswirkungen auf die Erziehung und Bildung des Kindes137
Marta Kečkéšová, Alica Vančová

Education of pupils with incurable illness in Slovakia – partial results of qualitative research154
Kristína Tkáčová

| | |
|--|-----|
| Awareness of the Le Bon Départ – good start method and its application in counselling facilities in the Slovakia | 167 |
| <i>Kristína Tkáčová, Alice Vančová</i> | |
| Neuropedagogical aspects of education and their application to the intervention program “Complex Movement Therapy” | 183 |
| <i>Nikoletta Szászová, Alice Vančová</i> | |
| Features of the subjective quality of life of people with disabilities | 196 |
| <i>Leysan Zakirova, Lyubov Komarova, Landish Khamitova (translator)</i> | |
| Features of formation of life competencies in junior schoolchildren with intellectual disabilities | 205 |
| <i>Elena Borisova, Irina Kozina</i> | |
| Facilitation of the dynamics of social interaction skills development in pre-school children with autism spectrum disorder | 215 |
| <i>Veronika Vasina, Elvira Sadretidinova, Irina Nigmatullina</i> | |
| Probleme der Integrationserziehung und des Deutschunterrichts (am Beispiel Österreichs) | 224 |
| <i>Mag. Lina Embacher</i> | |

Chapter 2 University and institutional scientific research: Psychology and Pedagogy of Education and Digital transformation

| | |
|---|-----|
| Informality of digital approaches and time turbulence as a social dyssynchrony | 234 |
| <i>Elena Merzon, Irene Sibgatullina-Denis, Svetlana Fedorova, Lane Teriaeva-Maerz</i> | |
| Institutional studies of asynchronies of academic mobility and the crisis of intellectual integration | 238 |
| <i>Elena Merzon, Oskar Raif. Riabov, Irene Sibgatullina-Denis, Anna Samba</i> | |
| Formation of digital competence in students of pedagogical institutions of higher education in Ukraine in the post-COVID space | 245 |
| <i>Kateryna Kruty, Iryna Desnova, Oksana Holiuk, Oleksandra Shykyrynska</i> | |
| Priorities and prospects for the development of Kazakhstani research universities | 262 |
| <i>Aiman Azmukhanova, Saniya Nurdavletova</i> | |
| The image of science and the choice of scientific careers in the contemporary culture | 270 |
| <i>Natalya Martishina, Elena Taskaeva</i> | |
| Digital competence of modern students | 288 |
| <i>Svetlana Fedorova, Natalia Golikova, Anna Novikova</i> | |
| An integrated approach to the professional and personal formation of the student in the information and educational environment of the university | 300 |
| <i>Elena Alekseeva, Elvira Vorontsova</i> | |
| Educational consulting in the system of distance learning support | 311 |
| <i>Elena Kondratenko, Sergei Lavrentiev</i> | |

| | |
|---|-----|
| Russian linguistic worldview in social adaptation of foreign students | 321 |
| <i>Elena Kartashova, Ekaterina Plotnikova</i> | |
| Mobile Pedagogy: Analysis, Requirements and Experience of Implementation | 336 |
| <i>Vera Toktarova, Dina Semenova, Anna Shpak</i> | |
| The usage of digital resources and technologies in the professional develop- ment of high school graduates | 350 |
| <i>Aksar Eltemerov, Daria Ivanova</i> | |
| Socio-psychological portrait of preschoolers in the digital age | 356 |
| <i>Olga Petuchova, Svetlana Grunina</i> | |
| Integrated approach in personality-oriented psychological counseling | 367 |
| <i>Svetlana Domracheva, Irina Dremina</i> | |
| Social practice in professional training of intending teachers of preschool edu- cational institutions | 381 |
| <i>Natalia Chaldyshkina, Olga Shestakova, Natalya Kornilova</i> | |
| Psychological readiness for maternity of girls left without parental care | 397 |
| <i>Rezida Khusnutdinova, Julia Anisimova, Elena Konovalova</i> | |
| Digital technologies in the correction of writing disorders in children | 411 |
| <i>Olga Shterts, Galiya Ldokova</i> | |
| Analysis of some aspects of the development project management for gifted students | 421 |
| <i>Ilya Ushakov, Snezhana Ushakova, Oksana Tatarinova</i> | |
| Comparison of Full-Time and Distance Learning | 426 |
| <i>Ivan Zotin, Alina Paradaeva, Dilyara Farshatova</i> | |
| Regulation of emotional states with the help of interior design: a designer's experience | 439 |
| <i>Irina Nikolaeva</i> | |
| Inclusion in design | 455 |
| <i>Konstantin Ryabov, Oskar Raif. Riabov</i> | |
| Notes on contributors | 460 |

Politics forge borders, education and science dismantles them

In order to implement the strategies of the European Association for International Education www.eaie.org for the internationalisation of universities and education development institutes of EU, CIS and RF countries, interaction of experienced researchers in international research programmes ERASMUS+, joint participation in grant competitions of world institutes for advanced study, IfII Institute for intellectual integrations (original name: IfII Institut für Intellektuelle Integration), together with teams of authors from partner universities and free authors, is publishing articles in the II International collective scientific digital monograph 2022 'University and institutional scientific research' in the frame of the project 'The sustainability of science in a post-COVID world' <https://phaidra.univie.ac.at/view/o:1376736>.

The monograph editors:

Prof. DDr.Sc. Irene Sibgatullina-Denis, Austria, is chief scientific editor;

Prof. DDr.Sc. Alica Vančová, Slovakia, is a scientific editor;

Dr. Susanne Blumesberger, MSc, Austria, is a repository editor.

IfII Institut für intellektuelle Integration is an independent organization promoting international academic partnerships. The IfII implements the principles of sustainable development and implements the project "Digital University – Digital Region". The organization's activity is not related to making commercial profit, career political goals of its leaders and is justified by the need to apply the European experience in strategies to ensure the quality of international education.

IfII Institut für intellektuelle Integration is the center for intellectual integration of postgraduate education in the field of innovation in the management of international education. IfII contributes to the internationalization of higher and continuing education systems, the introduction of sustainable partnership technologies between academic institutions of the European countries.

IfII aspires to become a platform for the integration of leading principles for the implementation of quality assurance systems, career activation, ranking of the intellectual potential of universities. The basic principle of cooperation with universities is the technological principle of "resources build-up" - "uniting with complication".

Expanding access to all levels of education, promoting informal education is a priority in the choice of IfII activities.

I thank everyone for the work they have done and invite to take part in the IfII-2023 project to publish a collective scientific digital monograph 'Studies in Formal and Non-Formal Education'.

*Univ.Prof. Dr.Sc. Dipl.Ing. Oskar Raif. Riabov,
Director General, Institute for Intellectual Integrations*

Editors' Foreword

Dear authors and dear colleagues from universities in different regions of the world, for a whole year 2022 we have been working on the digital monograph 'University and institutional scientific research'. It has been a challenging year for all of us, as geopolitical events in 2022 have changed much about the intellectual integration of the world's scientists. But nothing can change what we call the research ethic.

Each member of the academic author team in the digital monograph contributed to the 'enrichment' of one or another institutional research theory. The publications author teams were unselfish and critical in making sure that their paper was highly verifiable, coherent, heuristic and reproducible. It is also important for each of us to show the morals of a scientist and humanity towards the participants in the research presented.

The project editorial team has done all it could to ensure that the research results are accessible and open to the scientific community in many parts of the EU and the world. We all have an interest in following fully the rules of scientific ethics for scientists and presenting the scientific results of authors of articles to the public in a dignified manner in accordance with the principles of the 'Association of Internet Researchers' and open science promotion ethics developed at Harvard University 1999/09/17 for the global scholarly community. Our general operating principle in promoting the research results: we are all equals in the face of the truth of science.

We thank everyone who has been with us all this year. Our special thanks go to the project director Prof. Dr.Sc. Emma Feigl (Austria) for all her efforts in all phases of the publication; to the Head of the Institute of Special Education Studies, Faculty of Education, Comenius University Bratislava Prof. DDr.Sc. Alica Vančová (Slovakia) for coordinating Slovak authors and participating in editorial meetings; to the Head of Repository management PHAIDRA-Services, University of Vienna Dr Susanne Blumesberger, MSc (Austria) for the possibility of cooperation with the PHAIDRA Network; to the Head of the ISBN-Agentur Österreich Ms. Isabel Huber, BA (Austria) for detailed explanations on promoting the monograph in Austrian libraries. And finally, our great thanks go to Univ. Prof. Dr.Sc. Dipl.Ing. Oskar Raif. Riabov, Director General of the Institute for Intellectual Integrations for many ideas for future monographs and for inspiring the editors to do their creative work.

Sincerely, editor team:

Prof. DDr.Sc. Irene Sibgatullina-Denis,

Prof. DDr.Sc. Alica Vančová,

Dr. Susanne Blumesberger, MSc

CHAPTER 1

University and institutional scientific research: Inclusion and Integration



INCLUSIVE EDUCATION OF PUPILS WITH SPECIAL EDUCATIONAL NEEDS FROM THE PERSPECTIVE OF RESEARCH STUDIES

Miroslava Bartoňová

Abstract. Inclusive education means a continuous process of change, both in the organization of the school, the use of special methods and didactic concepts, and in the composition of the teaching staff. This article aims to define and describe inclusive education from the perspective of research studies within an international context. Based on the findings of the conducted research studies, the article provides information on how key actors (especially researchers and teachers) understand inclusive education and its difficulties. It also provides suggestions on how to approach inclusive education for pupils with special educational needs, with an emphasis on pupils with specific learning disabilities.

Keywords: pupils with special educational needs, inclusion, inclusive education, teacher, education, heterogeneity, research.

Introduction

Inclusive education means a continuous process of change, in the organization of the school, the use of special methods and didactic concepts, in the composition of the teaching staff as well [1; 23; 24]. A significant step towards promoting inclusion includes the ratification of the Convention on the Rights of Persons with Disabilities, approved by the UN General Assembly in December 2006. Individual states have gradually joined with their laws on equal treatment and legal means of protection against discrimination: Slovakia 2011, Czech Republic 2009, Germany, 2009 [2]. For inclusive education is valid the argument of a heterogeneous learning environment in which both able-bodied and disabled students are educated. Heterogeneity must be perceived in an even broader sense, i.e., cultural, ethnic, linguistic, cognitive heterogeneity [3].

We accept inclusive education as a subordinate concept to inclusion as such, i.e., inclusion that concerns the whole society, not only education [4; 23; 24]. Inclusive education aims to ensure equal opportunities for education, and the emphasis here is on respect for human rights, including the right to education. Linked to this is the requirement for schools to be more open and accepting of pupils without any exception.

Inclusive education of students with special educational needs

The inclusive process is conditioned not even only by the legislative setting of the school system, but also by the creation and secure of specific conditions in schools and school counselling centres. It is also related to the role of teachers, special educators, psychologists, educational counsellors, as well as school principals. Their attitudes are formed not only by the basis of the applicable system rules, knowledge of relevant information and the ability to work critically with it, but all things mentioned above are the reflection of the inclusive culture of the school.

The authors Lazarová, Pohl et al. [5] analysed the issue of inclusive education in international documents with a focus on meeting the individual needs of pupils with SEN. Based on them inclusion concerns the whole school. There is a need for an interplay of reliable structures and continuous reflection. Reliable structures include the internal agreement of the school, creating connections at different levels and thus allowing space for pedagogical and didactic work. At the same time, schools emphasize on constantly reflecting critically on practice and possibly adapting to identified needs. Continuous reflection relies on close collaboration between the school management and the teaching team. Inclusive schools are designed to meet the learning needs of all participants within a shared environment and activities.

M. Vítková, M. Bartoňová et al. [6] dealt with a project that focused on quality teaching of pupils with SEN in an inclusive primary school classroom with the intention of making inclusive teaching relevant to the individual needs of pupils. A significant component of the research was the implementation of support and the creation of methodologies and concepts that would simplify the social adaptation and learning process of pupils with SEN in an inclusive classroom, by using a range of methods, approaches, principles, and appropriate tools.

Currently, the concept of inclusion is at different stages of development in European countries.

Leading countries on the way to inclusion include Sweden, Italy, Finland, the USA, and the UK. A research survey conducted by the European Agency for the Development of Special Education (2003, 2012) divided countries into three categories in relation to inclusion. The first category includes countries that are developing policies and practices aimed at including almost all pupils in mainstream education. These efforts are supported by a wide range of mainstream-focused services. This approach can be found in Spain, Greece, Italy, Portugal, Sweden,

Iceland, Norway, and Cyprus (one-track approach). Countries belonging to the second category have a system of inclusive schools and special schools, examples can be found in the Czech Republic, Slovakia, and the Federal Republic of Germany (multi-track approach). This system is pervasive and there are several possibilities to include a pupil with special educational needs in the educational process. The third category is Belgium and Switzerland with a two-track approach. O. Speck [7], a German teacher, analyses the current difficult situation with the implementation of inclusive education and gives a proposal to overcome the barriers in the mindset of teachers, parents and the general public.

Foreign Experts have studied the success of primary schools in relation to the level of inclusion. The conclusions of their research show that the quality of inclusion is directly related to the quality of teaching and achievement of the pupils. Good and effective planning of inclusion and inclusive strategies lead to the positive inclusive school climate and help to the enrichment of all pupils, disabled and non-disabled. Furthermore, inclusion researchers emphasize that inclusive approaches require considerable effort in terms of professionalism, organization, and time [8].

Dealing with student diversity can be seen as a teacher's incentive to teach creatively. Teaching in an inclusive classroom requires respect for the cultural particularities of the pupils and should be focused to meet the social, emotional, and cognitive abilities, needs of individual pupils. In the process of developing a concept for inclusive teaching, we are looking for an answer to the question of how to create a common teaching to suit everyone, with the support and usage of foreign experience [9].

Co-teaching brings that in one school classroom there is a greater variation in the individual and performance abilities of pupils. In particular, there is an increasing number of pupils with SEN (special educational needs) who previously were in the special school system. This creates different requirements for their teaching, there is debate in terms of the principles of inclusion - also known as a curriculum dilemma [7]. Co-education of pupils with special needs with SEN with intact classmates is also handled by Bartoňová, Vítková [10].

The National Program for the Development of Education in the Slovak Republic declares that part of an inclusive school is the teacher as a promoter of an individual success-oriented educational culture with reasonable and high expectations for each pupil. Teacher is equipped

with the competences and skills needed for extensive individualization. Osvaldová, Vrabcová [11] conducted a research investigation to map the current offer of educational programs in the Czech and Slovak Republic for secondary school teachers in terms of further education in the field of inclusion and working with pupils with special educational needs. On the basis of the content analysis of individual educational programs, they found that 14 valid educational programs focused on inclusive education and work with pupils with special educational needs were on offer in the period of the survey in the Slovak Republic for teachers of the second level of primary school. In the Czech Republic, they identified 6 educational programs that deal primarily with the subject matter.

Inclusive education for students with specific learning disabilities

Based on the research were presented, it is proven that the largest number of pupils in inclusive classrooms are students with Specific Learning Disabilities (SLD). Specific learning disabilities is a term that refers to a heterogeneous group of deficits that manifest themselves in the acquisition of communication, reading, writing and mathematics. The problems are individual in nature and arise from CNS dysfunction as a consequence of dysfunctions necessary for the acquisition of school skills, affecting a significant proportion of the child and adult population [12]. It can take a longer time for correct identification for students with SPU, causing further learning problems with their motivation and self-assessment. For this reason, early identification is essential to detect these difficulties, we talk about deficits of sub-functions. The detection of these deficits (risks) from children point of view, leads to the elimination of obstacles in their subsequent education [13].

Re-education and intervention for pupils with SPU is long-term and requires considerable effort on the part of the pupil, teacher, family, and other professionals. During the process of planning educational strategies and interventions, the teacher is working with the knowledge of the pupil's developmental characteristics, in order to respect his/her individuality. Intervention must be on time and linked to the pupil's psychological needs and must be implemented consistently and with sufficient intensity. Routine teaching and intervention must be coordinated as part of a coherent system. The teacher of the class accepts responsibility for active learning in collaboration with other professionals. The teacher makes decisions about the providing of support that are based on a variety of sources and relevant information. Research confirms that to be effective, teachers need to understand best practice in teaching and

adapt it for pupils with special educational needs, including those with SEN. One of the most important need is positive attitudes towards inclusion [14].

Pastrňáková [15], based on the conclusions of her research, refers that a common approach in pupil education from the perspective of the teacher is the peer learning method, an individual approach to the pupil, in which teachers try to understand the student's conception and manifestations of specific specific learning disabilities. They also use cooperative learning where they reinforce the classroom community and positive climate. They are open-minded to use more innovative methods such as brainstorming, motivational methods, demonstration, observation, object manipulation, project methods and games, experiential learning methods, critical thinking, creative problem solving, experimentation and exploration. For students with Specific Learning Disabilities, it is also necessary to pay increased attention to the development of metacognitive skills and to show pupils different ways of working with compensatory aids and help them find the most optimal learning style, their learning preferences [16].

Zelina [17, 229] notes that “metacognitive knowledge includes strategic knowledge, which involves a review of information about the meaning of cognition, includes knowledge about the solved tasks, and includes knowledge about the self”. Many interventions aimed at improving the quality of the educational process could successfully benefit from strengthening these aspects, but this requires further research. Lichtsteiner Müller [18, 162] also came to similar conclusions. She presents research where teachers focused on the area of self-control in the learning process, i.e. planning and using strategies, follow-up and evaluation, as the ability to acquire, retain and transfer information tends to be limited in students with Specific Learning Disabilities.

Furthermore, it has been proved by research that the use of a chosen strategy is effective if the pupils understand the connection between the effective use of the strategy and their learning outcomes. During the process of planning instructional strategies, teachers reflect following things: what students are expected to learn, how they will evaluate student achievement, what they have learned so far, and what they are capable of [19]. In the context of the inclusive process, the level of readiness of schools to provide professional support to pupils, but also to teachers and parents, is often mentioned. What will the teacher do to keep the pupil's attention, how will the teacher be emotionally engaged, how will

the teacher acquire new information and skills, how will the teacher get feedback on the pupil's learning progress? The aim of research on cognitive strategies in pupils with SPU is to construct and validate strategies that help them with their learning [20]. Experts have pointed to the link between the strategies being used and the learning support [21; 22]. Analysing the literature on diagnosis and interventions for pupils with SPU, it can be concluded that more and more often there is the focus on executive function or metacognitive interventions for pupils with SPU. In recent years, metacognitive approaches (executive function training) have been used in many fields (special and therapeutic pedagogy, psychotherapy). They have a strong place in the case of students with Specific Learning Disabilities.

Conclusion

The main factors that lead to successful work in an inclusive classroom include the teacher's education and experience in the first place. The way of dealing with the diversity of the students is considered as an incentive for the teacher to teach creatively. Teaching in an inclusive classroom needs to be focused to suit the different social, emotional, and cognitive abilities, needs and developmental capacities of pupils. In order to develop the concept of inclusive teaching, an answer to the question is: how can we design collaborative teaching to suit all? Research shows that co-education is built on the integration of three basic factors that are essential for the successful education of a pupil with SEN: personality peculiarities of the student, the influences of the school environment and the level of cooperation between the different actors in education. The applied procedures aim at the comprehensive development of the pupil's personality.

Students with Specific Learning Difficulties are exposed to special intervention support, respecting two models, the practical skills model (process model) and the training skills model (programs of intervention). Despite the differences that exist in these models, researchers are looking for which model is more effective. For this reason, further research is needed in this area that would have significant educational and practical implications and contribute to more successful identification of all students, not just those with special educational needs.

References

1. Bartoňová M, Vítková M, et al. Vzdělávání se zaměřením na inkluzivní didaktiku a vyučování žáků se speciálními vzdělávacími potřebami ve škole hlavního vzdělávacího proudu. Brno: Masarykova univerzita; 2013.

2. Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky. Národný program rozvoja výchovy a vzdelávania 2018–2027 [Internet]. Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky [updated 2018 June 27; cited. feb]. Available from: <https://www.minedu.sk/20212-sk/vlada-schvalila-narodny-program-rozvoja-vychovy-a-vzdelavania/>
3. Hájková V, Strnadová I. Inkluzivní vzdělávání. Praha: Grada Publishing; 2010.
4. Booth T, Ainscow M. Ukazatel inkluze: rozvoj učení a zapojení ve školách. Praha: Rytmus; 2007. 109 p.
5. Lazarová B, Hloušková B, Trnková K, Pol M, Lukas J. Řízení inkluze ve škole. Brno: MU; 2015.
6. Bartoňová M, Vítková M. Efektivní vyučování v heterogenní třídě se zřetelem na metody a učební strategie. Brno: Masarykova univerzita; 2020.
7. Speck O. Dilemma Inklusion. Wie Schule allen Kindern gerecht werden kann. München: Ernst Reinhardt Verlag; 2019.
8. Heimlich U, Kahlert J. (Hrsg.). Inklusion in Schule und Unterricht. Wege zur Bildung für alle. Stuttgart: Kohlhammer; 2012.
9. Bartoňová M, Vítková M. et al. Inkluze ve škole a ve společnosti jako interdisciplinární téma. Brno: MU; 2016.
10. Bartoňová M, Vítková M. et al. Společné vzdělávání orientované na posílení kompetencí učitelů a žáků v inkluzivním prostředí školy. Brno: MU; 2017.
11. Ovavaldová Z, Vrabcová V. Prieskum ďalšieho vzdelávania učiteľov na Slovensku zameraného na inkluzívne vzdelávanie a prácu so žiakmi so špeciálnymi výchovnovzdelávacími potrebami In. Lifelong Learning – celoživotní vzdělávání, [Internet]. 2021 [cited Feb 1];11(1):59-74. Available from: https://lifelonglearning.mendelu.cz/media/pdf/LLL_20211101059.pdf
12. Harčaričková T. Pedagogika jednotlivcov s poruchami učenia. Bratislava: MA-BAC s.r.o.; 2008.
13. Harčaričková T, Rapsová L. Sociálne kompetencie žiakov so špecifickými poruchami učenia. In: Paedagogica specialis:32. Bratislava: Univerzita Komenského; 2018. p. 97-123.
14. Savage R, Erten O. Teaching in Inclusive Classrooms: The Link Between Teachers Attitudes- Practices and Student Outcomes. J Psychol Psychother. 2015. [cited 2022 Feb. 19];5:219. DOI: 10.4172/2161-0487.1000219.
15. Paštrnáková N. Prístupy a stratégie pedagógov pri vzdelávaní žiakov so špeciálnymi výchovno-vzdelávacími potrebami – vývinovými poruchami učenia v prostredí inkluzívnej školy. Brno: Masarykova univerzita; 2021.
16. Bartoňová M. Špecifické poruchy učení. Brno: Paido; 2018.
17. Zelina M. Strategie a metody rozvoja osobnosti dieťaťa. Bratislava: Iris; 2007.
18. Lichtsteiner, Müller M. (Hrsg.). Dyslexie, Dykalkulie. Chancengleichheit in Berufsbildung, Mittelschule und Hochschule. Bern: HEP Verlag; 2011. 162 p.
19. Bartoňová M. Špecifické poruchy učení: text k distančnému vzdelávaniu. 2. prepracované a rozšírené vydání. Brno: Paido; 2018.

20. Reid G. Dyslexia: an overview of recent research [Internet]. Routledge publications 2009 [updated 2019 November 23; cited 2019 Nov 15]. Available from: <https://www.drgavinreid.com/free-resources/dyslexia-an-overview-of-recent-research/>)
21. Harris K. R, Graham S. Self-regulated strategy development: A part of the writing process. In M. Pressley, K. E. Harris, & J. T. Guthrie (Eds.) (1992) Promoting academic competence in school. New York: Academic Press; 2003. 277-309 p.
22. Bartoňová M. Approaches to Students with Learning Disorders in Inclusive School Environment. Brno; 2014. 163 p. Available from: <https://munispace.muni.cz/library/catalog/book/1973>
23. Riabov, Oscar Raif - Vančová, Alica - Merzon, Elena E. - Sibgatullina-Denis, Irene : European strategy “education without exclusion: inclusion - integration” of the region-university system [elektronický dokument] In: 2nd International Conference on Economic and Social Trends for Sustainability of Modern Society [elektronický dokument]. - Londýn : European Publisher, 2021. - S. 2738-2746 [online]. – ISSN 2357-1330. – ISBN 978-1-80296-115-7
24. Sibgatullina-Denis, Irene - Riabov, Oscar Raif - Merzon, Elena E. - Vančová, Alica : Descriptive analysis of benchmarking in respect to SMART/UNI-Q systems intellectual integrations within the European higher education area = Deskriptivnyj analiz benčmarkinga intellektualnych integracij SMART/UNI-Q sistem v ramkach Evropejskogo prostranstva vyššego obrazovanija In: Integration of Education. - Roč. 24, č. 4 (2020), s. 532-551. - ISSN (print) 1991-9468 Registrované v: scopus



TRANSFORMATION OF THE SYSTEM OF SPECIAL EDUCATION COUNSELLING IN SLOVAKIA OVER MORE THAN THIRTY YEARS WITH EMPHASIS ON THE CURRENT CHANGE IN THE COUNSELLING SYSTEM

Alexandra Biščo Kastelová

Abstract. Institutionalized special education counselling in Slovakia has undergone many quantitative as well as qualitative changes from its beginnings to the present day. The main aim of this paper is to present the impact of the paradigm shift in the education of children and youth with special educational needs on the theory and practice of special education counselling, with an emphasis on the current transformation of the counselling system for individuals with special educational needs.

Keywords: special education counselling, special education counselling centre, counselling and prevention centre, specialised counselling and prevention centre, child and pupil with special educational needs, paradigm of special education and special education counselling

The emergence of “non-institutionalised” special education counselling is related to the establishment of the first educational institutions for the blind and deaf in the first half of the 18th century, which, according to Horňák [1], later expanded to include institutions for the physically and mentally handicapped and the socially disturbed. The duration of this stage was conditioned by the preference of the **paradigm of a relatively segregated way of educating individuals with disabilities** [2].

Viliam GAŇO [3, p.7], the nestor of Slovak special pedagogy, literally timelessly states in the introduction to the second supplemented edition of the publication *The Education of Defective Children*: „*In this connection I would like to point out the principle that children with minor defects are neither necessary nor expedient to be placed in special schools. As far as possible, the child should remain in a group of normal children, and it is therefore to be expected that pupils with minor physical, sensory and mental defects have been and will continue to be in primary nine-year schools.*” [3; 8].

Despite the above position of V. Gaňo, which is pointed out by Németh [2], on the issues of upbringing and education of children and pupils with disabilities in Slovakia, for decades the state officially preferred the paradigm of relatively segregated education of children and

pupils with special educational needs. The **so-called medical model** of disability, according to which, as Groma [4] argues, impairment or disability is primarily responsible for the consequences of disability in various areas of life, **has been reflected in the paradigm of special education** and has often resulted in practice in a certain stigmatisation of persons with disabilities and a preference for the paradigm of relatively segregated education of individuals with disabilities.

Changes in the philosophy and strategy of caring for individuals with disabilities, which took place in the 1970s, especially in Great Britain and the USA, contributed significantly to the change in the paradigm of special education in Slovakia (e.g. Mary Warnock's report on the state of special education in Great Britain from 1978). The Slovak Republic has ratified a number of important third-generation international instruments dealing with anti-discrimination and human rights issues (e.g. the Convention on the Rights of the Child, the Standard Rules for the Creation of Equal Opportunities for Persons with Disabilities, the UN Convention on the Rights of Persons with Disabilities).

The theory and practice of special education in Slovakia, as Németh [2] notes, was **until the early 1990s, in the spirit of the officially preferred paradigm, focused only on the issue of relatively segregated education of children and youth requiring special care**. The relatively large group of children and pupils with disabilities and handicaps who were included and placed in mainstream schools and educational institutions at the request of their legal representatives became increasingly its unaddressed problem. A certain attempt to legalise the situation was made by Decree No 127/1978 Coll. of the Ministry of Education of the SSR on schools for young people requiring special care, which allowed for the possibility of including and placing pupils requiring special care in mainstream-type primary schools in addition to schools for young people requiring special care. However, in connection with the diction of § 9, Németh [2] considers it necessary to mention that the condition was "to be successfully educated in a primary school", in other words - the decree did not oblige the school to create the necessary conditions for the education of a pupil requiring special care, nor did it presuppose the existence of a specialised counselling service.

The Concept of Education and Training of Disabled Children and Youth, approved by the Ministry of Education and Science of the Slovak Republic on 25 March 1993 under the number 1707/93-30, which equalized the relatively segregated and integrated way of educating children

and youth with special educational needs and thus emphasized the need for the establishment of institutionalized special-education counseling, represented the basic material of the breakthrough period of **the transition of the theory and practice of special education from the so-called medical model to the special-education model**. **The philosophy of the Concept of Education and Training of Disabled Children and Youth** was subsequently reflected in the Act of the National Assembly of the Slovak Republic No. 279/1993 Coll. Pursuant to §22 of the above-mentioned Act, special education counselling facilities provided professional care for disabled children and provided them with professional assistance in the process of integration into society in cooperation with the family, the school, specialist doctors and social workers, the target group being children with special educational needs at early and pre-school age, pupils with special educational needs placed in primary and secondary schools, special schools or mainstream schools, as well as parents or legal guardians, educators, professionals from other institutions who participate in complex special-educational rehabilitation care for children and pupils with special educational needs.

Institutionalized special education counseling was characterized by Németh [5, 77; 6, 93] on the basis of Vašek's [7, 61] definition of the subject of special education counseling as *“a theoretical and practical discipline of humanistically oriented special education, as an institutionalized, interactive, intentional special education process that uses special education diagnostics to detect and name problems in meeting the needs of a client with special educational needs. Subsequently, in collaboration with the client's social environment and with professionals from cooperating disciplines and from the auxiliary sciences of special education, the application of a complex range of counselling services contributes to achieving a balance between special educational needs and their socially acceptable content.”*

In the period 2002-2005, **several survey and research tasks were carried out at the level of the State Pedagogical Institute** in Bratislava, in which Németh and Štefková participated. The tasks were part of the Plan of the main tasks of the State Pedagogical Institute and the outputs obtained from the individual surveys and researches were formulated as a proposal for qualitative changes which were incorporated into the prepared amendment of the concept of special education counselling and which were to be decisive for the direction of special education counselling in the XXI century. The outputs of the conducted surveys and research became the basic material for setting out the main goals

and objectives of the 2007 concept of special-educational counselling, namely:

- a) streamlining the activities of special-educational counselling institutions,
- b) bringing professionals as close as possible to clients in their natural environment,
- c) mobility of special educational counselling services,
- d) the linking of special educational counselling services to existing special schools and special kindergartens,
- e) the linking of special educational guidance services to mainstream schools and nursery schools,
- f) optimal use of the professional and material capacities of special schools,
- g) reprofiling of two types of special-education counselling facilities, namely special-education counselling centres and children's integration centres, into a single facility - the Centre for Special-education Counselling,
- h) linking special-education counselling services to public health protection and promotion systems and health care delivery systems, in accordance with specific regulations of the Ministry of Health.

Another **research aimed at improving the level of special-educational counselling in relation to the integration or inclusion** of children and pupils with disabilities was conducted by Kastelová [8], where the research problem, research aim, research questions were presented in the intersection of two closely interrelated scientific fields in the system of special-educational sciences, namely special-educational counselling and special-educational diagnostics. In connection with the education of children and pupils with special educational needs, according to Kastelová [8], from the level of special-educational counseling centers, it is important to adequately place them in an educational institution that will saturate their special educational needs. This process is conditioned, among others, by the implementation of a high-quality and detailed special-educational diagnostics, the specific outcomes of which should be included in the Proposal for the education of a pupil with special educational needs to a special school, to a special kindergarten, to a kindergarten, to a primary school and to a secondary school. For these reasons, a nationwide quantitative-qualitative research was conducted by Kastelová [8] aimed at the analysis, comparison and evaluation of textual documents of official nature, one of the outcomes of which was the

development of a basic scheme - a template of special education examination reports serving as a guide for special educators in the processing and creation of examination reports.

In the intentions of the Concept of Special Educational Counselling approved by Government Resolution No. 282 of 21 March 2007, **Act of the National Assembly of the Slovak Republic No. 245/2008 Coll. on Education and Training (School Act)** and on Amendments and Additions to Certain Acts and **Decree of the Ministry of Education of the Slovak Republic No. 325/2008 Coll.** On school educational guidance and prevention facilities, the basic components of the educational guidance and prevention system were educational, psychological and special-pedagogical guidance and prevention facilities, namely the centre of pedagogical-psychological guidance and prevention, and the centre of special-pedagogical guidance. Other components of the educational counselling and prevention system included an educational counsellor, a school psychologist, a school special educator, a therapeutic educator, a social educator and a prevention coordinator.

Within the intentions of the valid legal norms, the Centre for Special Education Counselling (CSEC) provides comprehensive special education activities, psychological, diagnostic, counselling, rehabilitation, preventive, methodological, educational and other professional activities and a set of special education interventions for children and pupils with disabilities, including children and pupils with developmental disorders, with the aim of achieving optimal development of their personality and social integration. It searches for and keeps records of children and pupils with disabilities, including children with developmental disorders, participates in the provision of compensatory, re-educational and special teaching aids, teaches children and pupils with disabilities (including children and pupils with developmental disorders) how to use these aids, and evaluates the effectiveness of their use by the user. The Centre for Special Education Counselling provides counselling activities in the family, in the school or in a school facility, including the provision of professional assistance to children and educational staff, field special educators and in the form of short-term stays of the child or legal representatives with the child in this facility. In the implementation of specific activities, the special education counselling centre cooperates with the legal representatives of children and pupils with disabilities and other natural persons involved in their upbringing and education. Professional-methodological and material-technical assistance to the

professional staff of special education counselling centres and school special educators is provided by special education counselling centres which, with the approval of the Ministry of Education, are specialised in counselling for children with certain types of disabilities as resource centres, also outside the territorial jurisdiction of the competent local state administration authority in education.

Current transformation of the system of special education counselling

According to statistical data from the Centre for Scientific and Technical Information of the Slovak Republic (available at <http://www.cvtis.sk>), as of 15 September 2021, 146 state, private and religious centres of special pedagogical counselling in Slovakia provided professional care to approximately 90,000 children and pupils with disabilities, with the focus of the target group being a substantial part of the 42,661 individually integrated children and pupils enrolled and placed in kindergartens, elementary and secondary schools of the regular type (available at <https://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/statistiky>).

Currently, the Ministry of Education of the Slovak Republic is planning to transform the guidance system, with the main objective of these changes being the requirement to make guidance closer to the pupil and his/her needs. The changes will concern the organisational structure, with the redistribution of counselling competences into five levels (five successive levels) [9]. One of the levels will be covered by a newly created **school support team**, which will operate at school level. The guidance system will be linked through **five downstream support levels**. It is the classroom teachers who will form the first tier in the reform of the guidance system. It is therefore necessary to provide methodological support for teachers to work with children with special needs and to identify these individual problems. The second tier will be formed by the school support team. This is the backbone of the whole reform of the guidance system. The school support team is made up of existing positions in schools, although new positions are also likely to be created. These include teaching assistants, school psychologists, speech and language therapists, school special educators, social pedagogues and career counsellors. The support level of the third and fourth level will be formed by **counselling and prevention centres**. This is a newly created entity based on the transformation of the existing pedagogical-psychological counselling and prevention centres and special education coun-

selling centres. The fifth level of the counselling system will consist of **specialised counselling and prevention centres**. In practice, these will provide highly specialised professional activity.

Another change in the counselling system will be the definition of **new standards for professional activities** provided by counselling facilities, both in terms of performance and content [9]. The Research Institute of Child Psychology and Pathopsychology is currently working on creating these standards. The pillar of the changes will be the standards of services provided, thus ensuring the same level of quality in individual counselling centres. It will also be beneficial that the standards will for the first time be defined in law, in draft legislation. A single e-system will also be created. A new feature is that in future there will be a **client coordinator** at the counselling and prevention centres, who will work with the school and the family. He will accompany the client during the counselling service.

The transformation of the advisory system is part of **the amendment of the Education Act No. 245/2008**. According to Article 130 of the amendment, the system of counselling and prevention includes professional activities such as counselling, psychological activities, pedagogical activities, special-educational activities, speech therapy, therapeutic-pedagogical activities and socio-pedagogical activities aimed at optimising the educational, educational, psychological, social and career development of children from birth to the end of vocational training. Counselling is also provided to the legal representatives of children or pupils, representatives of the establishment, pedagogical staff or professional staff. The counselling and prevention system consists of counselling and prevention facilities and, in schools, of teaching staff, school support teams or professional school staff. The counselling and prevention facilities are **the counselling and prevention centre and the specialised counselling and prevention centre**.

Pursuant to § 131 of the amendment to Act No 245/2008, the professional activity is carried out in accordance with the performance and content standards of educational counselling through the support levels of the first level, second level, third level, fourth level, fifth level. The activities of **the first level of support** are carried out by the teaching staff, the professional staff of the school and the school support team. Tier 1 support activities include pedagogical diagnosis, pedagogical intervention, educational counselling, career counselling, development of inclusive education, prevention. **Second level support activities** are

carried out by the school's special educator and a school professional staff member in cooperation with the counselling and prevention centre. Second level support activities include orientation diagnosis, prevention, counselling, intervention, crisis intervention, re-education, methodological support and counselling for pedagogical staff, professional staff and legal representatives or representatives of the establishment. **The activities of the third level of support** shall be carried out by a professional staff member of the counselling and prevention centre. Level 3 support activities include basic diagnosis, sub-diagnosis or comprehensive diagnosis, counselling, prevention, intervention, crisis intervention, therapy, rehabilitation and re-education, methodological activities and supervision activities for the school support team, educational staff, professional staff and legal representatives or representatives of the establishment. **Level 4 support activities** are carried out by a professional staff member of the counselling and prevention centre, build on the level 3 support activities and complement the comprehensive multidisciplinary care within the counselling and prevention centre. Level 4 support activities include specialised professional activities, counselling, prevention, specialised diagnostics, comprehensive diagnostics and differential diagnostics, therapy, rehabilitation and re-education, provision of compensatory, re-educational and special educational aids, methodological activities and supervision activities for the school support team, teaching staff, professional staff and legal representatives or representatives of the establishment. **Fifth-level support activities** are carried out by a professional staff member of a specialised counselling and prevention centre. Level 5 support activities include specialised professional activities, counselling, prevention, comprehensive diagnostics and highly specialised differential diagnostics, therapy, rehabilitation, professional activities in relation to children up to the age of five, the provision of compensatory, re-educational and special educational aids, methodological activities and supervision activities for the school support team, pedagogical staff, professional staff and legal representatives or representatives of the establishment.

Conclusion

Despite more than thirty years of implementation of integrated education of children and pupils with disabilities in pedagogical practice and almost thirty years of operation of special education counselling facilities, there are still problems and obstacles that are usually found in the common penetration of the implementation of integrated, resp. the

direct consequence of this is that the integration/inclusion of individuals with disabilities is still not realised at the level envisaged by the individual concepts [11; 12; 13; 14]. We assume that it is the current trends of special pedagogy, as well as its sub-disciplines, especially special pedagogical counselling and special pedagogical diagnostics, to focus on the target group of both children and pupils with special educational needs, as well as teachers and professional staff in order to create optimal conditions for the development of their key competences in the conditions of integrated and inclusive education in the environment of mainstream kindergartens, primary and secondary schools will significantly contribute to the improvement of the integration/inclusion process and will contribute to the fulfilment of Jesensky's [10] perception of integration and inclusion as a model of "one for the other".

Summary

Institutionalized special pedagogical counselling has undergone from its beginning in the years 1991 a number of quantitative but also qualitative changes. Our contribution does not present a detailed genesis of the creation and development of special-pedagogical counselling institutions. Its main purpose is to present the effect of a paradigm shift of education of children and youth with special educational needs in theory and practice of special-pedagogical counselling.

References

1. Horňák L, Kollárová E, Matuška O. Dejiny špeciálnej pedagogiky. Vysokoškolské učebné texty. Prešov: Prešovská univerzita; 2002. 199 p. ISBN 80-8068-122-8
2. Biščo Kastelová A, Németh O. Základy špeciálnopedagogickej diagnostiky a špeciálnopedagogického poradenstva. Bratislava: IRIS, 2020. ISBN 978-80-8200-056-9
3. Gaňo V. Výchova defektných detí. 2. dopl. vyd. Bratislava: SPN; 1962. 260 s.
4. Groma M. Kariérové poradenstvo pre osoby so zdravotným postihnutím v sieti modelov zdravotného postihnutia. In: Kariérové poradenstvo v teórii a praxi, 2014 - ročník 3 - číslo 6. (Dostupné na <http://www.saaic.sk/casopiskp.html>). 815 p. ISBN 978-80-89322-00-8.
5. Németh O. Špeciálnopedagogické poradenstvo na Slovensku. 1. vyd. - Bratislava : Sapientia; 2010. 198 s. ISBN 978-80-89229-20-8
6. Németh O. Stručná história špeciálnopedagogického poradenstva na Slovensku. Bratislava : Štátny pedagogický ústav; 2011. 226 p. ISBN 978-80-8118-102-3
7. Vašek Š. Základy špeciálnej pedagogiky. 4. doplnené vydanie. Bratislava: Sapientia; 2008. 226 s. ISBN 978-80-89229-11-6.

8. Kastelová A. Diagnostika v špeciálnopedagogickom poradenstve. Bratislava: IRIS; 2014. 381 s. ISBN 978-80-89726-09-7
9. Horniaková J. Poradenský systém sa zmení. Bude bližšie k rodičom a žiakom. 2021. Dostupné na: <https://eduworld.sk/cd/janka-horniakova/8453/poradensky-system-sa-zmeni-bude-blizsie-k-ziakom-i-rodicom>
10. Jesenský J. Základy komprehenzivní speciální pedagogiky. Hradec Králové: Gaudeamus; 2000. ISBN 80-7041-196-1
11. Nagyová K, Harčaričková T. Siblings of children with oncological illness. AD ALTA [elektronický dokument]. - Roč. 9, č. 2 (2019), s. 220-226 [print], ISSN (print) 1804-7890 ISSN (online) 2464-6733
12. Groma M, Biščo Kastelová A, Vančová A. [UKOPDSPP] : Kariérové poradenstvo a pedeutológia v podmienkach inkluzívneho vzdelávania. 1. vyd. Bratislava: Iris; 2016. 126 s.
13. Vančová A, Biščo Kastelová A. The current research view on the issue of special educational diagnostics, special educational counselling and early intervention for children with disabilities in Slovakia In: INTE 2016 : Proceedings book, Vol. 4 [elektronický zdroj]. Vol. 4 (2016), s. 604-613 online]. ISSN 2146-7358 [INTE 2016 : International Conference on New Horizons in Education. 4th, Vienna, 13.-15.7.2016]
14. Vančová A. Interdisciplinarita a inovácie v rehabilitačných, korekčných a terapeutických postupoch špeciálneho pedagóga so zameraním na deti raného a predškolského veku s poškodením CNS. In: Možnosti a limity výzkumu ve speciální pedagogice. Olomouc: Univerzita Palackého v Olomouci; 2013. 103-123 p. ISBN 978-80-244-3930-3



BEHAVIORAL DISORDERS AMONG PUPILS IN SPECIAL PRIMARY SCHOOLS AND OPTIONS FOR ELIMINATING THEM

Ondrej Čapák, Michaela Čapáková

Abstract. This paper discusses pupils with behavioral disorders and measures aimed at preventing pathological behaviors in pupils with intellectual disabilities. It seeks to characterize individual behavioral disorders and to present programs and practical activities for preventing these cases when pupils with intellectual disabilities are educated, while also analyzing behavior disorders that occur most frequently at special primary schools, focusing on the causes of these disorders and classifying them. The thesis characterizes preventive programs countering pathological behavior in children and pupils in both Slovakia and other countries. The empirical section compares the prevalence of behavioral disorders in two special primary schools and concentrates on methods for preventing and eliminating them. Prior to research, classroom teachers at the special primary schools completed a questionnaire. This was the research method we used. The application section of this thesis focuses on a musical entitled *Pridaj sa k nám (Join Us)*. It also presents a story aimed at eliminating bullying and creating cooperation between pupils.

Keywords: intellectual disability, behavioral disorder, preventing behavioral disorders.

Introduction

This paper addresses the issue of behavioral disorders among students with intellectual disabilities, discussing the effective elimination of those found in an educational setting.

The term “behavioral disorder” covers a wide range. It includes a variety of aberrant behaviors classified among the worst and most unacceptable antisocial behaviors. Behavioral disorders have become increasingly common in today’s world, with the media frequently publicizing the acts people with these disorders have committed. All too often adolescents and even younger people have perpetrated them.

Behavioral disorders are also apparent in individuals with intellectual disabilities, possibly triggered by feeling of inferiority, of which, despite their disability, these pupils are well aware. Often, they turn to aggression and vulgarity to overcome their disability and the deficiencies coming from it, but also descend to serious delinquency or substance abuse. Such behavior feeds a desire to get even with their intact peers and stand on equal terms, which carries a risk. Individuals with intel-

lectual disabilities desire acceptance within a group and believe that it will come from gaining attention within it. Another cause for the development of behavioral disorders among pupils in a special primary school environment is pathological friends who lend them support in such behavior or exploit them for the wrong purposes. Pupils with intellectual disabilities have a reduced capability to cope with stressful, tense and distressing situations. They frequently cannot properly weigh the results of their actions, which subsequently appears in increased nervousness and irritability and starts them toward pathological behavior and accompanying aggression.

Although most of society condemns individuals with behavioral disorders, few reflect on what drives them to commit acts, what they have experienced through in their lives, and the true reason behind such behavior and actions.

Causes of behavioral disorders

Alica Vančová, Darina Tarciová and Jana Jurášková mention that people become aware of themselves based on what they experience. However, society perceives and judges individuals through how they express themselves outwardly (Vančová, Tarciová and Jurášková, 2007).

In this paper, behavioral disorders refer to patterns of behavior that are undesirable and unacceptable in the sociocultural norm (Fisher and Škoda, 2008).

According to Antónia Tisovičová, this includes all the deviations and idiosyncrasies that accompany individuals as they develop and mature. This includes dissocial, antisocial and antisocial behavior (Tisovičová, 2007).

Jiří Škoda and Slavomil Fischer discuss the causes of behavior disorders that develop, noting them to be multifactorial in nature. There are biological, mental and social factors involved, where the first includes gender. Males more commonly suffer from behavioral disorders than females and they have a greater tendency to engage in aggressive behavior. Another biological factor is age. The development of behavior disorders has been earliest observed at the age of five. Biological factors also include congenital predispositions. Individuals with a lower frustration tolerance tend to be more predisposed (Fisher and Škoda, 2008).

Tisovičová notes that behavior disorders arise when an individual's basic genotypic dispositions fail to develop harmoniously, when the environment and upbringing are not sufficiently motivating (Tisovičová, 2007).

Psychological factors also contribute to the development of behavioral disorders. Fisher and Skoda see individual motivations and needs to be critical. The need for security, safety and love having not been satisfied can often be the origin of disorder (Fisher and Škoda, 2008).

Among social factors, family upbringing is the most crucial. Tisovičová states that it plays a decisive role in both mental health and social success. An optimally functioning family provides an irreplaceable environment for raising a child (Tisovičová, 2007).

Another important factor is the impact of the groups and cliques to which the individual belongs. Fisher and Skoda note that behavior disorders occur mainly in antisocial and dissociative groups. A common cause is negative groups and dysfunctional families associating with each other. Obtaining an understanding of what causes behavioral disorders and the typical characteristics of individuals with them is essential in education, working with socially disturbed youth and ongoing training (Fisher and Škoda, 2008).

Classifying behavioral disorders

Dissocial behavior:

Tisovičová does not categorize dissocial behavior as socially dangerous. Other forces may have likely influenced these behaviors and a person's actions will draw attention to their particular environment. While such behavior does not meet society's standards, it poses no danger to it. Unless detected and addressed in time, more serious forms of such behavior can develop. It follows from this line of thinking that both asocial and antisocial behavior may result from a dissociative disorder that has either gone undetected or not been properly addressed. Consciously telling a falsehood is considered lying, most frequently with the intention of avoiding obligations, escaping from an unpleasant situation, or gaining an undeserved reward. Nevertheless, there can also be intent behind the lie to harm somebody (Tisovičová, 2007).

Middle and older school-aged children may find lying to be a necessary defense. Kateřina Juklová and Radka Skorunková mention that their peers tolerate lying and deceiving people of authority, however it becomes more serious when seeking to harm a person or for achieving personal gain. In an emergency, no one would consider such deception a defense strategy. Often enough, other adverse manifestations such as egocentrism, aggressiveness and recklessness accompany the telling of lies. It is also necessary to distinguish between "true" lying, where the individual is aware of the falsehood, and "false" lying, where needs im-

possible to satisfy in real life are met through lies (Juklová and Skorunková, 2009).

Asocial behavior:

These behavioral disorders represent a certain degree of danger to society according to Fisher and Škoda. Yet such a behavioral disorder has even more impact on the person associated with it. More permanent in nature, the outcome is frequently severer forms (Fisher and Škoda, 2008).

Helena Kuberová considers antisocial behavior within a social group to be isolation and not participating in social activities, with the person becoming a closed-off recluse (Kuberová, 2010).

Escape can be seen as a defense, when there the feeling of no other way to solve the problem (Juklová and Skorunková, 2009).

Tisovičová defines a pupil running away to be leaving home without permission and traveling a distance away. It frequently is the culmination of a strong emotional outburst. While they may run away because of a fear of punishment, a bad family situation can also trigger it. Because running away from home is a short-term reaction with no plan in place for what comes next, most desire to go back to their home after they have calmed down and, once they return, they never flee again (Tisovičová, 2007).

On the other hand, long-term running away from home can descend into vagrancy, frequently caused by a lack of emotional attachment to the family. Juklová and Skorunková see such wandering to increase with age. It is frequently associated with other pathological behaviors such as theft or drug abuse (Juklová and Skorunková, 2009).

Vančová, Tarcsiová and Jurášková consider truancy to be arbitrarily not going to school and fulfilling educational obligations, or not having an excuse for skipping classes. Either a single student or a group of students can “play hooky” or wander off elsewhere. A distinction should be made between impulsively not going to school and when the decision to stay away has been made ahead of time (Vančová, Tarcsiová and Jurášková, 2007).

Vladimír Klein and Rastislav Rosický note that the motivation for truancy may be an inability to adapt to school and its rules. It most commonly occurs after there has been a long illness or parents take an irresponsible attitude. The main motivator is a distaste for schoolwork. Pupils with below-average intelligence or specific learning disabilities cannot keep up with the pace of work and fall behind, making them feel

inadequate and a failure. Other problems include fear of punishment and ridicule from teachers, poor relationships with classmates imitating others. The most prevalent causes of truancy are bullying by classmates, fear of a particular teacher, or even punishment. The school environment may actually be dysfunctional, so staying away from school may be an act of protecting self-esteem. The family situation at home sometimes complicates school attendance, like when the pupil is caring for younger siblings or also working. Prohibiting their children from attending school may sometimes be a way for parents to express their disagreement with it or with societal norms (Klein and Rosický, 2010). Tibor Baška, Martina Bašková and Ladislav Bobák write that missing classes increase the likelihood of poor grades and dropping out of school. Pupils most apt to skip school come from socially disadvantaged backgrounds or exhibit low prosocial behavior, with the truancy rate rising among students in upper grades (Baška, Bašková and Bobák, 2011). Libuše Ludíková and Marie Renotírová cite alcohol abuse as a common source of poor behavior because it is so easily available (Renotírová and Ludíková, 2006).

Milan Tuček cites the educational environment, family atmosphere and the media as major influence on alcoholism among underage and adolescent students. Young people frequently see alcohol as a symbol of strength and power, for lifting moods, and as a way of impressing the opposite sex, yet they overlook the negatives are addiction, aggression, alcohol's narcotic effect and loss of self-control (Tuček, 2003)

Suicide is a self-aggressive behavior potentially characterized as a violent act. Marie Vágnerová classifies it as a self-preservation disorder. Anyone contemplating suicide may be currently thinking and reacting in a non-standard way, yet no pathological alteration of the mind may have taken place. If an individual acting in such a way were unable to assess the consequences adequately, committing suicide because of a mental disorder would be an act of taking their own life. It characterizes self-destruction without conscious intent (Vágnerová, 2004).

Fisher and Škoda view how suicide is committed to be also important and they divide the methods into two categories. Easier ways typical for girls and women are overdosing or slitting veins. Men are inclined to opt for harsher methods such as hanging themselves, jumping off a tall object or in front of a moving train, or using a firearm (Fischer and Škoda, 2009).

Vágnerová describes causes of suicidal actions, which are mostly multifactorial. People suffering from depression or schizophrenia have frequent thoughts of death. Alcohol and drugs can also be significant factors. Suicide may also be a response to severe somatic illness or disability. Other possible causes are loss of social ties to a particular group or clique, or a dysfunctional family where stressors are violence or an absent father (Vágnerová, 2004).

Antisocial behavior:

A characterization of antisocial personality disorder is no regard shown for legal norms. Tisovičová classifies it as actions directly endangering and harming society. It is the highest degree of disruptive behavior. She also defines theft as the intentional seizure and appropriation of somebody else's property without their knowledge (Tisovičová, 2007).

Renotiérová and Ludíková mention that the method is important when assessing theft. Unpremeditated thefts, where such behavior is impulsive, are of lesser importance. In this case, there was no resistance to the actual need to appropriate an attractive article. More serious are thefts planned beforehand. These are characteristic among the older school-aged. The younger the persons committing the theft, the worse their prognosis. Conspiracies to steal are the most serious form, where behavior is encouraged by the other conspirators (Renotiérová and Ludíková, 2006).

There are a variety of reasons and motivations to engage in theft. Fisher and Škoda hypothesize such behavior as pupils having learned it in the family environment and therefore they consider it normal. The cause may also be self-fulfillment, possibly related to psychological deprivation in the family. Friends, family or others close to them may have been involved in criminal gangs. It may also be due to abuse by an adult and stealing satisfies the adult's needs. Theft frequently occurs among individuals with lower intellect because they are more impressionable (Fisher and Škoda, 2008).

Tisovičová considers robbery to have been the theft involving physical or psychological violence with the intent of seizing another person's property and this is a very serious offense. When committed by children and adolescents, it is largely associated with being a runaway or a vagrant (Tisovičová, 2007).

Eva Smiková describes bullying as a form of aggression involving deliberate repeated physical or psychological harm to another person. The aggressor may be a single pupil or a group of them. In addition, an

obvious power imbalance existed between the aggressor and the bullied (Smíková, 2014).

Pavel Řičan and Pavlína Janošová classify bullying as direct and indirect. Direct bullying consists of various forms of physical and psychological violence committed against the victim, whereas in indirect bullying, the victim is ostracized, leaving them socially isolated. The latter is more prevalent among girls (Řičan and Janošová, 2010).

Smíková and Alena Kopányiová divide aggressors into three groups. They can be rude, clowns or even a decent pupil. Rude bullies tend to be both coarse and impulsive, characterized by having physical strength and frequently disrupting relationships with authority figures. They bully their victims harshly and mercilessly. On the other hand, what distinguishes a polite aggressor is their refined speech and behavior with a tendency toward narcissism. They tend to exhibit anxiety and are inclined to be sadistic. They bully subtly, covertly and without witnesses present. The prankster is mostly optimistic and adventurous, with a great deal of self-confidence. Generally well liked, for them bullying is an adventure. Their strategy is to invent situations that ridicule the victim (Smíková and Kopányiová, 2013)

Victims of bullying are commonly shy, intimidated and weak-willed, unable to defend themselves. Their appearance or social skills may be handicapped as well (Vacek, 2009).

Certain signs of bullying can be spotted in classrooms. Direct signs, according to Klein and Rosický, include ridiculing, ironic and derisive remarks; various nicknames given to pupils, pranks played on them and humiliation. Others may torment or command them or give them various patronizing orders they try to obey. The aggressors may chase, kick or poke the victim, with the bullied pupil never fighting back. There is a significant disparity of physical strength in a fight and the weaker pupil seeks to escape from such a situation. Indirect signs of bullying include excluding the bullied pupil from the class. Nobody expresses any interest in them and they turn into outsiders. The pupil becomes sad and depressed, afraid to speak in front of the class (Klein and Rosický, 2010).

Eliminating behavioral disorders

Programs outside Slovakia seeking to eliminate behavioral disorders

KiVa is a program in Finland endeavoring to prevent and address bullying in schools. Founded at the University of Turku, up to 90% of Finland's primary schools now use this program. It includes both general

and specific measures to prevent and address bullying (KIVA ANTI-BULLYING PROGRAM, 2014).

Kiva organizer Juha Ollila describes it as containing both general and special measures. What he finds exceptional about Kiva is that it is more than just a philosophy, but also a wealth of material and concrete tools. It also utilizes a virtual learning environment and is much more systematic and structured than other existing anti-bullying programs. Kiva includes specific instructions for certain situations, such as what to do, when to do it and how to do it. General measures include ten two-hour lessons each school year with virtual environments such as the KiVa game, KiVa Street and KiVa mail. These virtual resources are linked to classroom lessons, during which the role of pupils observing bullying, empathy towards victims, and both aiding and defending them are discussed. The main role of Kiva is to teach pupils to respect each other. KiVa game and KiVa Street further feature repetition of what pupils have learned, situational learning, and developing motivation. KiVa has also developed a handbook for parents, which explains how to behave if a classmate is bullying their child, and what to do if their child is the aggressor. When observing bullying, special measures come into play and each case is resolved between the school's KiVa team and the pupils involved. These include individual and group discussions, support provided to the victim by classmates and the class teacher, establishing standards of behavior for the aggressor, and protecting the victim from further attacks (Ollila, 2014).

Julie Savignac describes a program in Canada called All Children Excel (ACE) for pupils between six and 15 years of age with a high probability of behavioral problems and likely to commit crimes. It is also for individuals involved in criminal activity, as well as abused and exploited children (Savignac, 2009).

Schools, police and community organizations are involved in the program (Savignac and Léonard, 2011).

Savignac along with Lucie Léonard and Christina Strasbourg outline ACE's objectives, pointing out several goals that include reducing drug dependency among youth, keeping young people in school and promoting healthy development of at-risk students. The program seeks to help increase school attendance, motivate pupils to study and develop social competences. It includes working with families, teaching parents how to manage and lead a family, and preventing domestic violence, neglect and abuse. All Children Excel takes an approach that combines social

welfare and criminal justice. Social workers strive to eliminate risk factors and build positive factors that focus on communities, schools and families. A prerequisite for admission to the program is an offense committed before the age of 10. Various evaluations are also necessary, such as from corrections professionals, faith-based health organizations and advocacy groups. A family history is also required, which examines offenses that family members have committed. Talking to teachers and classmates is important. Upon evaluating the findings, a decision is then made about whether the candidate pupil will be admitted to the program (Savignac, Léonard and Strasbourg, 2011).

Programs within Slovakia seeking to eliminate behavioral disorders

Jozef Ihnacík introduced *Srdce na dlani* (*Hearts on Our Sleeves*), a preventive program focused on multicultural tolerance and eradicating violence in schools. First developed in the United States as “Second Step”, the program is currently active in countries such as Norway, Denmark, Germany, United Kingdom, Finland, Iceland, Latvia, Canada, Australia and Japan. *Srdce na dlani* has operated in Slovakia since 2003 (Ihnacík, 2014).

A universal program designed to reduce problem behaviors, promote student achievement, and to raise self-regulated social competence among students, *Srdce na dlani* is structured for discussion of certain parts. The first section concentrates on empathy, developing the skills needed to identify emotions inside and in others, to become aware of what evokes certain feelings, and learning how to respond empathically. Regulating emotions is the focus of the second part. Here the aim is to learn about prosocial skills and practically use them, to behave in social relationships, and to reduce aggressive and impulsive behavior. Accordingly, pupils find out about relaxation techniques and find out how to resolve life conflicts. The third part delves into anger management and learning how to suppress rage, aggression and tension. The objective behind this section of the program is to teach students techniques that eliminate and reduce anger and hostile behavior, while also enabling them to respond constructively to such behavior (Savignac, Léonard and Strasbourg, 2011).

Malujem svoj svet (*Love Your World*) uses art therapy to eliminate and prevent behavioral disorders. It draws upon verbal communication, as Ihnacík points out, to let pupils express their inner feelings, conditions and relationship to the outside world more clearly. Simultaneously, art therapy develops imagination and fine motor skills (Ihnacík, 2014).

PRE-RESEARCH CHARACTERISTICS

Behavioral disorders are common in pupils educated in special primary schools. There are many programs and methods for eradicating unwanted manifestations in them. The pre-survey sought to analyze behavioral disorders and find ways to prevent and eliminate them in special elementary schools.

Pre-research file selection

Nineteen second-year classroom teachers teaching at two special primary schools completed questionnaires about their classes. Thirteen of them taught at the special primary boarding school in Michalovce and the remaining six at the special primary boarding school in Trenčín.

Objectives and role of pre-research

Pre-research aimed to identify, analyze and compare behavior disorders at the schools at Michalovce and Trenčín. Accordingly, it concentrated on methods and procedures for preventing and eliminating them. Prior to research, quantitative studies were conducted with the second-year classroom teachers.

Pre-research methodology

A questionnaire was the method used in pre-research to gather empirical information for later parsing in quantitative research. It was compiled from relevant literature and information mentioned in the theoretical part of this paper. The questionnaire is composed of different types of questions. There are closed questions where the teachers can choose an answer as instructed. (Questions 1, 2, 5) and a group of semi-open questions where they could select several options or write in another one (Questions 3 and 4).

Research questions:

1. On average, how many pupils from your class have behavioral disorders?
2. What behavioral disorders are most common among your pupils?
3. What are the most common methods you use to address behavioral disorders?
4. What are the most common methods you use to prevent behavioral disorders?
5. Does your school have a behavioral disorder prevention program and, if yes, what is it?

Interpreting the results from pre-research

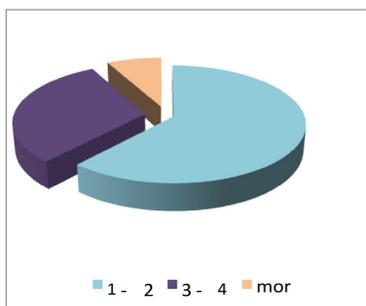
1. On average, how many pupils from your class have behavioral disorders?

| Special Primary School Michalovce | |
|-----------------------------------|--------|
| 0 | 0.00% |
| 1-2 | 61.50% |
| 3-4 | 30.80% |
| More | 7.70% |

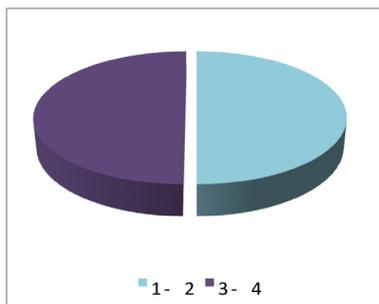
Table 1: Behavioral disorders at classes in Michalovce

| Special Primary School Trenčín | |
|--------------------------------|--------|
| 0 | 0.00% |
| 1-2 | 50.00% |
| 3-4 | 50.00% |
| more | 0.00% |

Table 2: Behavioral disorders at classes in Trenčín



Graph 1: Behavioral disorders at classes in Michalovce



Graph 2: Behavioral disorders at classes in Trenčín

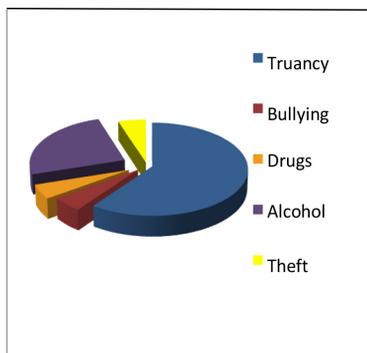
There were behavioral disorders experienced in all of the surveyed classes at the special primary school in Michalovce, with 61.50% of the classroom teachers reporting one or two pupils with behavioral disorders in their classes, 30.80% with three or four pupils, and 7.70% having more than four pupils with them.

The teachers at the special primary school in Trenčín likewise reported behavioral disorders in all of their classes. Half of classroom teachers indicated that they have one or two students with behavioral disorders in their classrooms and the other half reported three or four with them in their classrooms.

2. What behavioral disorders are most common among your pupils?

| Special Primary School Michalovce | School |
|-----------------------------------|--------|
| Truancy | 60.00% |
| Bullying | 5.00% |
| Drugs | 5.00% |
| Alcohol | 25.00% |
| Theft | 5.00% |
| Robbery | 0% |
| Vandalism | 0% |
| Self-injury and suicidal thoughts | 0% |

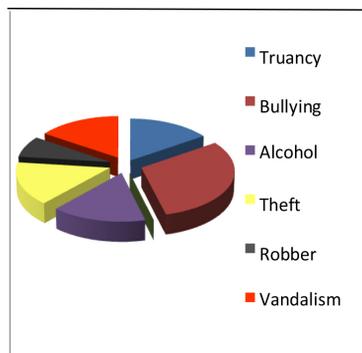
Table 3: Specific behavioral disorders at classes in Michalovce



Graph 3: Specific behavioral disorders at classes in Michalovce

| Special Primary School Trenčín | School |
|-----------------------------------|--------|
| Truancy | 15.40% |
| Bullying | 30.80% |
| Drugs | 0% |
| Alcohol | 15.40% |
| Theft | 15.40% |
| Robbery | 7.60% |
| Vandalism | 15.40% |
| Self-injury and suicidal thoughts | 0% |

Table 4: Behavioral disorders at classes in Trenčín



Graph 4: Behavioral disorders at classes in Trenčín

The most frequent socio-pathological phenomenon indicated at the special primary school in Michalovce was 60% of the pupils not coming to school, with drinking alcohol reported in 25% of the classes surveyed, and drugs and theft mentioned by 5% of the teachers.

At the Trenčín special primary school, the most frequent socio-pathological phenomenon reported was bullying, with an incidence of 30.77% in classrooms. Vandalism, theft, and truancy were mentioned in 15.40% of the classes, while 7.60% of the teachers surveyed mentioned robbery.

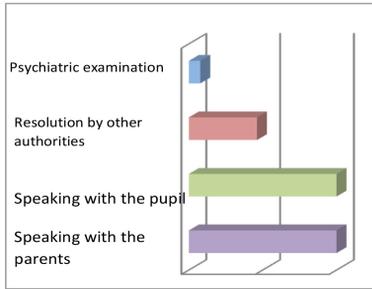
3. What are the most common methods you use to address behavioral disorders?

| Special Primary School Michalovce | |
|--|--------|
| Speaking with the parents | 100% |
| Speaking with the pupil | 100% |
| Resolving the situation with other authorities | 46.20% |
| Psychiatric examination | 7.70% |

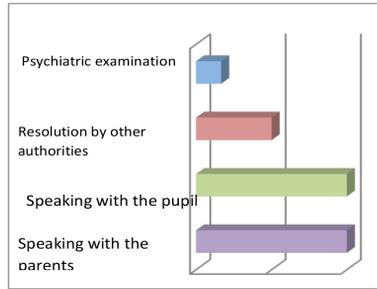
Table 5: Resolution methods at Michalovce

| Special Primary School Trenčín | |
|--|--------|
| Speaking with the pupil | 100% |
| Speaking with a parent | 100% |
| Resolving the situation with other authorities | 50% |
| Social experts | 16.60% |

Table 6: Specific resolution methods at Trenčín



Graph 5: Resolution methods at Michalovce



Graph 6: Resolution methods at Trenčín

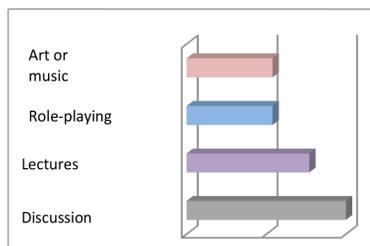
The most common methods of addressing behavioral disorders at the special primary school in Michalovce are speaking with the parents or with the pupil, used by all the classroom teachers. Among the other methods, 46.20% turned to other authorities and 7.70% of the teachers sought to resolve the problem through psychiatric examination.

At the special school in Trenčín, the teachers spoke with the parents or the students in all of the classes, although half of the classroom teachers had sought to resolve behavioral disorders through other authorities and 16% of them mentioned social workers having been resolved the situation.

4. What are the most common methods you use to address behavioral disorders?

| Special Primary School Michalovce | |
|--|--------|
| Discussion | 100% |
| Lectures | 76.90% |
| Role-playing | 53.80% |
| Art or music | 53.80% |

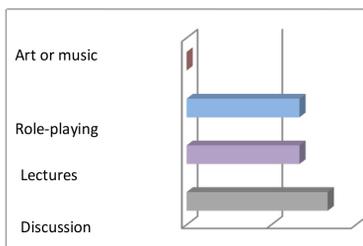
Table 7: Prevention methods at Michalovce



Graph 7: Prevention methods at Michalovce

| Special Primary School Trenčín | |
|---------------------------------------|--------|
| Discussion | 83.30% |
| Lectures | 66.60% |
| Role-playing | 66.60% |
| Art or music | 0% |

Table 8: Prevention methods at Trenčín



Graph 8: Prevention methods at Trenčín

The most common method employed at the special primary school in Michalovce to prevent behavioral disorders is discussion, which 100% of the teachers use. Another method frequently used is lecturing, which 76.90% of the teachers mentioned, while 53.80% of the classroom teachers used role-playing, art and music to prevent behavioral disorders.

Likewise, at the special primary school in Trenčín, the method most commonly used was discussion with 83.30% of the classroom teachers using it. Lecturing and role-playing were indicated by 66.60% of the teachers. They mentioned lectures as a method, most often organized in cooperation with the police and psychologists. Education in ethics was the most common method of prevention.

5. Does your school have a behavioral disorder prevention program and, if yes, what is it?

**Special Primary School
Michalovce**

| | |
|----|------|
| No | 100% |
|----|------|

Table 9: Prevention programs at Michalovce



Graph 9: Prevention programs at Michalovce

**Special Primary School
Trenčín**

| | |
|----|------|
| No | 100% |
|----|------|

Table 10: Prevention programs at Trenčín



Graph 10: Prevention programs at Trenčín

Neither of the two special primary schools have a prevention program in place to prevent behavioral disorders.

Conclusions drawn from pre-research

Pre-research found behavioral disorders common in the two special primary schools compared. Both use similar practices to prevent and address behavioral disorders. The most common methods for resolving them are to speak with the parents or pupils, with lectures and discussions also most often used. Role-playing, art and music are less frequent. Neither school has a prevention program. In our opinion, they should be concentrating more on preventing behavioral disorders. The survey and associate research indicate discussions and lectures to be insufficient for keeping behavior disorders from happening. Prevention programs that develop empathy, tolerance and the emotional side of pupils' personalities might help. The schools should be more proactive on how to approach behavior disorders in their classes. If detected early, it

can prevent the behavior disorders detected among pupils from developing into something more serious.

For pupils with intellectual disabilities, respecting social and legal norms is essential. Unless they do, integrating them will be impossible as society inherently keeps such individuals with behavioral disorders marginalized.

APPLICATION SECTION

This section describes a musical, *Pridaj sa k nám* (Join Us), which we presented to discuss behavioral disorders. Music and drama highlight the situations presented by pupils from the special boarding school in Trenčín. The musical strives to prevent behavior disorders among younger school-aged pupils, alternating between an illustration of how pupils with good relationships and respect for each other behave and, in contrast, what happens among pupils with signs of behavioral issues.

The text of the musical is below.

G:

How nice it is to have a ball and every day to play together.
The day seems nicer when there are friends to play with.
To return what you borrow, to share friends and not lose them.
To return what you borrow, to share and make them happy.

B:

What's mine I don't share, the ball belongs to me, so get your own.
I'm not sharing with anyone, get away from me or I'll take the ball.
Never coming back, just disappear, no need for friends, no need for their mischief.
I want nothing back, rather lose them, keep them myself, no one else needs them.

G:

Every day something can happen, someone can quickly get hurt.
When the ball hits your head and you fall quickly to the ground.
Help each other, lend a hand; a friend in need is a friend indeed.
Help each other; act quickly together to solve everything.

B:

Look at him lying there, what a wimp, just run along home.
Leave him alone, don't help, we've got other things to do.
Why bother with him, leave him on the ground, he's worthless anyway.
What's in it for us, let's get away, he can help yourself.

G:

Janko kicks the ball well, Danko catches nasty shots at the goal.
Girls like football and always applaud the boys when they score.
A good team plays together, whoever stays alone is out of luck.
Spend time together, have fun and remember the moments.

B:

You can't pass, you can't score, you can't do anything but mess up.
I'm bored playing with you, I'm always the only one that gets attention.
I'm the star, I get the applause, I do wonders with the ball, there's nobody like me.
I'm the boss, I've got the plan, I'm the one nobody dares cross.

Next in this section comes Oat the Goat, a story produced by the New Zealand Ministry of Education. It is educational in nature and interactively explains key situations involving bullying and taunting in a classroom. The tale provides a lesson and sends a message about differences each pupil exhibits, with the intent of eradicating such teasing and insults and for children to cooperate with each other. The interactive design guides pupils to the correct solution in specific situations found in both school and practical life. Because no one had translated Oat the Goat into Slovak, we decided to do it ourselves and adapt it in the language as part of this thesis's application section. Clicking on the "Read" box lets a teacher retell the story in Slovak.

The fairy tale is interactive, so pupils can decide what the main character in the story is going to do. Making the wrong choice teaches a lesson and the pupils can choose another option until they reach the correct approach. Clicking with the mouse determines how fluidly the story runs. After it ends, pupils can discuss with the teacher the theme and lessons learned

There are pages from the story to color at <https://www.bullyingfree.nz/schools/activities-and-events/oat-the-goat/#colouringin>

The translation in the application section is not literal, but rather a free translation that nevertheless accurately reflects the idea in each part of the tale. It is freely available to read at <http://www.oatthegoat.co.nz/>

References

1. Baška T, Bašková M, Bobák L. Sociálne determinanty zdravia školákov. Košice: Equilibria; 2011. 150 p. ISBN: 978-80-89284-73-3.
2. Fischer S, Škoda J. Speciální pedagogika. Praha: Triton; 2008. 205 p. ISBN: 978-80-7387-014-0.

3. Fischer S, Škoda J. Sociální patologie. Praha: Grada Publishing; 2009. 224 p. ISBN 978-80-247-2781-3.
4. Ihnacík J. Koordinátor prevencie závislostí a sociálně-patologických javov. Bratislava: Metodicko-Pedagogické Centrum; 2013. 58 p. ISBN: 978-808052-509-5
5. Juklová K, Skorunková R. Základy psychopatologie. Hradec Králové: Gaudeamus; 2009. 115 p. ISBN 978-80-7041-873-4.
6. Klein V, Rosický R. 2010. Sociální pedagogika pre pomáhajúce profesie. Nitra: Univerzita Konštantína Filozofa; 2010. 272 p. ISBN 978-80-8094-835-1.
7. Kuberová H. Didaktika ošetrovatelství. Praha: Portál; 2010. 216 p. ISBN: 978-80-7367-684-1
8. Renotierová M, Ludíková L. Speciální pedagogika. Olomouc; 2006. 313 p. ISBN 80-244-1475-9
9. Ričan P, Janošová P. Jak na šikanu. Praha: Grada Publishing; 2010. 160 p. ISBN: 978-80-247-2991-6
10. Savignac J. Families, youth and delinquency: the state of knowledge, and family based juvenile delinquency prevention program. Ottawa: National Crime Prevention Centre; 2009. 63 p. ISBN: 978-1-100-11686-0
11. Savignac J, Léonard L, Strasbourg Ch. Promising and model crime prevention programs volume II. Ottawa: National Crime Prevention Centre; 2011. 80 p. ISBN: 978-1-100-18349-7
12. Smíková E, Kopányová A. Pedagogické možnosti znižovania agresivity detí v školskom veku. Bratislava: Metodicko-Pedagogické Centrum; 2013. 70 p. ISBN: 978-80-8052-478-4.
13. Tisovičová A. Poruchy správania a ich klasifikácie. Ružomberok: Edičné Stredisko Pedagogickej Fakulty; 2007. 114 p. ISBN: 987-80-8084-161-4
14. Tuček K. Psychopatologické a sociálně-patologické prejavy detí a mládeže. IRIS; 2003. 168 p. ISBN: 80-88778-99-9.
15. Vacek P. Šikana, agresori, oběti a „bezradní“ učitelé. In Šikana jako etický, psychologický a pedagogický problém. Praha: Tribun; 2009. 270 p. ISBN: 978-80-7399-857-8
16. Vágnerová M. 2004. Psychopatologie pro pomáhající profese. Praha: Portál; 2004. 870 p. ISBN: 80-7178-802-3
17. Vančová A, Tarciová D, Jurášková J, et al. Základy speciální pedagogiky. Bratislava: Sapientia; 2007. 109 p. ISBN: 978-80-89113-30-9
18. Vančová A. Inovácie v teórii, metodológii a praxeológii pedagogiky mentálne postihnutých. 1 vyd. Ostrava: Ostravská univerzita, Pedagogická fakulta; 2014. 200 p. ISBN 978-80-7464-673-7
19. Adamus P, Vančová A, Löfflerová M. Poruchy autistického spektra v kontextu aktuálních interdisciplinárních poznatků. 1 vyd. Ostrava: Ostravská univerzita, Pedagogická fakulta; 2017. 168 p. ISBN 978-80-7464-957-8
20. Vančová A, Kečkovéšová M. Legislatívne a inštitucionálne aspekty pomoci osobám so zdravotným znevýhodnením. 1 vyd. Užhorod: RIK-U; 2017. 242 p. ISBN 978-617-7404-74-2

21. Vančová A, Kečkéšová M. Sociálna politika - a právo ako prostriedok ochrany osôb so zdravotným znevýhodnením v SR = Social policy - and law as a means of protection of persons with disabilities in Slovakia. - 1. vyd. Magdeburg: Europäische Bildungswerke Für Beruf und Gesellschaft e.V.; 2019. 265 p. [print] ISBN 978-3-00-064649-2
22. Vančová A. Edukácia viacnásobne postihnutých. 1 vyd. Bratislava: Sapiaentia; 2001. 90 p. ISBN 80-967180-7-X
23. Vančová A, Kečkéšová M, Smetanová D. Ochrana práv dieťaťa a rodiny v Slovenskej republike rámcovaná platnou legislatívou [elektronický zdroj]. 1 vyd. Bratislava: Slovakiaeducation publishing; 2017. 217 p. [CD-ROM] ISBN 978-80-89834-03-7
24. Internet links
25. KiVa antibullyng program. Prevent and take Action against bullying in Schools. [online] Available from: <https://www.kivaprogram.net/what-is-kiva/>
26. Ollila J. KiVa antibullying program. University of Turku s.11-27 [online] Available from: http://www.sonetbull-platform.eu/wp-content/uploads/bp-attachments/16320/UTU_KiVa.pdf
27. Smíková E .Šikanovanie. [online] Available from: http://web.saaic.sk/nrcg_new/doc/Zbornik/10_Kap-3.4.pdf



SELECTED ASPECTS OF THE QUALITY OF LIFE OF INDIVIDUALS WITH ONCOLOGICAL DISEASE IN CONTEXTS OF SPECIAL PEDAGOGY

Terézia Harčaričková, Zuzana Ivanová

Abstract. Oncological diseases in adolescence and young adulthood has not only medical but also psychosocial consequences that are specific to a given age group. The quality of life of adolescents and young adults is affected by the developmental period itself, and the natural physiological changes that occur in these individuals are exacerbated by cancer. The presented paper is focused on selected aspects of quality of life of individuals with cancer in adolescence and young adulthood. The content of the presented paper is structured as an overview study, which captures scientific, professional articles and studies carried out in Slovakia and abroad. Knowledge of the impact of the specifics of oncological disease on the quality of life of these individuals is a necessary condition for determining adequate intervention procedures, treatment and methods of work not only for special pedagogy, medicine but also for social work and psychology.

Keywords: quality of life, individual with oncological disease, adolescent, young adult.

An individual with a disease is the object of research in various scientific disciplines. In terms of diagnosis, symptomatology and treatment, it is an object of research in medical disciplines. In terms of the impact on the individual's personality, it is primarily the object of research in psychology, but in terms of educational needs and improving the quality of life, it is also the object of research in special pedagogy. Individuals with illness, incurable or chronic illness represent a very specific group of individuals who, in terms of etiology, symptomatology, treatment and the impact of the disease on the individual's personality, require attention in all areas of life - personal, social, work and educational, especially in diagnosis of the disease and treatment and, in certain cases, even after cure, especially in the case of diseases which may be recurrent or which have caused permanent consequences for the individual.

A disease such as cancer is not just a matter of the body. It affects the person as a whole. His mind, emotions and spiritual aspect of his personality. Therefore, the treatment and comprehensive care must focus not only on the physical but also on the mental, emotional and spiritual dimensions of the individual. This fact therefore requires the coopera-

tion of experts in the field of medicine, psychology or even special pedagogy from the period of diagnosis of the disease, throughout the duration of the disease, during treatment and also after the end of treatment.

Quality of life of individuals with oncological disease during adolescence and young adult

Quality of life (QoL) has become one of the most commonly used terms not only in modern medicine, but also in many other disciplines such as psychology, sociology or special pedagogy. When trying to define the quality of life, it is necessary to realize that the quality of life is subjective for each individual and therefore we can look at it from several levels. Engel and Bergsmam (in Křivohlavý, 2002), defined the possibilities of approach to measuring the quality of life in the macro-plane, meso-plane and personality - micro-plane. From the macro-point of view, the quality of life is considered as a part of social units, when it comes to perceiving the meaning of life, taking it into account in major political decisions and touching on, for example, the fight against disease or poverty. From the point of view of the mezzanine, it is a matter of respect for the moral value of life, man and his relations between people. In satisfying the needs of each member of a smaller social group, the overall social climate and support. From the point of view of the personality level, the quality of life is very subjective for each individual, it is his subjective evaluation of the state, health, pain, energy, fulfillment of goals or expectations and from the point of view of physical existence, the quality of life is the result of observing behavior.

Subjective assessment of quality of life is very important to us, as an individual with cancer is influenced by a number of factors that affect his view of himself, his own social role, ability to apply and an overall view of the value of life and the possibility of self-realization.

Among these factors, Harčáriková (2016) includes for example: pain, nausea, fear of relapse, mood swings, behavioral problems, incorrect hygiene habits, insomnia atc..

Benáček, Reichlová (2007) combine the quality of life with the subjective feeling of happiness and satisfaction with the life (well-being) of the individual and his complex well-being and satisfaction. Stodůlková and Kopřivová (2003) further state that the quality of life is limited by genetic equipment, environment, way of life, standard of living and life satisfaction of the individual. An individual with cancer thus represents a very endangered group, which as a result of the disease may lose a certain standard of living and well-being, social contacts, the ability to

perform activities that satisfy the need for a sense of fulfillment and usefulness and generally lose the joy of life. According to the WHO, the concept of quality of life includes four areas that capture the dimensions of human life, regardless of age, ethnicity, gender or disability, namely physical health and independence, mental health and spirituality, social relationships and the environment. Dragomirecká, Bartoňová (2006) also distinguish the degree of independence and personal beliefs.

Due to the fact that personality is a bio-psycho-socio-spiritual entity, it is necessary to take into account all aspects of an individual's personality when assessing the quality of life. The disease, such as cancer, affects all areas of life that intersect and influence each other, as shown in Figure 1. Determinants of quality of life include: physical health, mental health, sexuality, spirituality, social, emotional area, self-sufficiency rate and cognitive area.

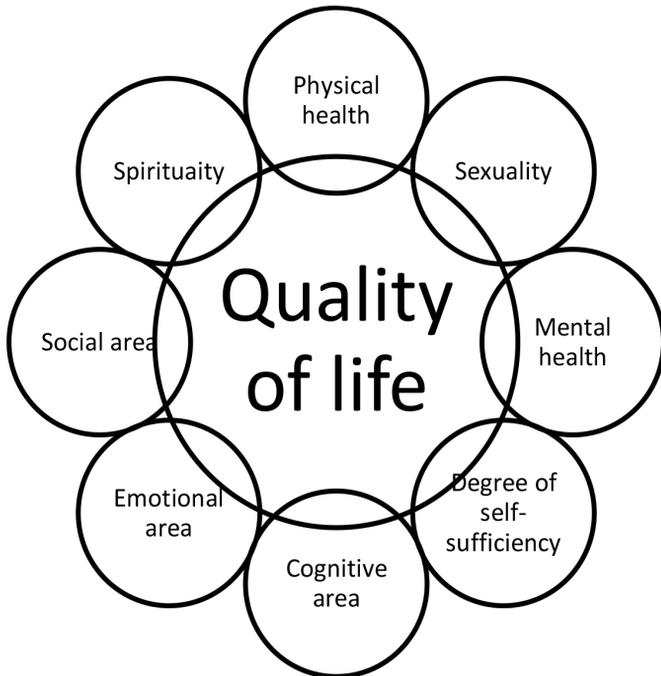


Figure 1: Determinants of quality of life. (Own processing according to WHO, Dragomirecká, Bartoňová (2006), Eiser (2004))

Individuals with cancer during adolescence and young adulthood face many psychological, emotional, physical and social challenges that differ from, for example the problems of children or the elderly. Caring for such individuals in order to improve their quality of life requires an approach of specialized care for each area of the personality. According to Valentine (2013), adolescence and young adulthood are a unique and turbulent period of physical, emotional, social and cognitive change, during which an individual achieves key points of personal development. These include, for example, the development of personal value systems and identities, independence from parents, taking responsibility for one's own behavior and achieving financial and social autonomy. Hormonal changes lead to changes in physical appearance, changes in body image and changes in sexuality. Cognitive skills are evolving with improved abstract thinking and a greater ability to understand the consequences and make plans for the future, and the need to socialize these individuals is increasing. However, cancer complicates the achievement of these developmental roles in both adolescents and young adults, often leads to delayed independence, increased dependence on parents, family and reliance on the help of others, they may feel lonely due to loss of contacts and socialization opportunities in the work or school environment.

Adolescents and young adults with chronic illness not only face the usual physical, social and mental changes, but also have to cope with the often unusual personality requirements that result from illness and treatment. Treatment requirements and frequent hospitalizations can affect an individual's ability to attend school and maintain relationships with peers or peers at school and in the job. However, these treatment requirements and the cancer itself do not only affect the individual with the cancer, but also his family, parents, siblings, grandparents or peers, as Nagyová, Harčáriková (2019) states.

At a time of increasing independence, chronic illness can lead to greater dependence on the family and further increase the feeling of social isolation. It is therefore not surprising that adolescents and young adults with chronic illness are at increased risk of psychosocial, emotional and cognitive disorders. Millstein (1993 in Spear, Kulbok, 2001) state that the main areas of adolescent quality of life are related to physical and pubertal changes (10-14 years), later it is interrelationships, comparing oneself to peers (15-17 years) and then these areas are aimed at school achievement and career (18-21 years). However, each of these areas is determined primarily by the disease.

One of the studies focused on the quality of life of individuals with cancer during adolescence and young adulthood was the Dutch study from 2012-2016, conducted by a team of authors Kaal S., Lidington E., Prins J., Jansen R., Horst E., Servaes P., Graaf W. and Hudson O. The aim of the study was to identify quality-of-life problems of adolescents and young adults with health-related cancer (HRQL) and inconsistencies in health professionals. The study involved 83 patients and 34 medical staff. The main research method was a quality of life questionnaire for individuals with cancer, which was used for both groups. The results of the study showed that staff rated physical symptoms such as fatigue, appetite, pain, constipation, sleep disorders, nausea and neuropathy significantly higher (= more problems) than patients. At the same time, cancer patients rated overall physical health and quality of life, happiness, satisfaction, usefulness and support from others significantly higher than medical staff. Patients identified the biggest problems in the areas of perception of support for others, fear of initial cancer diagnosis, fear of family and overall quality of life. The most problematic areas identified by medical staff were the fear of diagnosis, treatment, family and the intervention of the disease in employment / study. The discrepancy between the perceptions of patients and healthcare professionals has highlighted the need to involve patients in physical and psychosocial care.

Relationships between adolescents with cancer and their peers were studied by Fladeboe K., Walker A., Rosenberg and Lynn K. in a study published in the *Journal of Adolescent and Young Adult Oncology* in 2020. This qualitative study focused on identifying the importance of peer relationships with and without cancer. The study involved 14 adolescents aged 12-20 years with cancer and data collection was conducted through a semi-structured interview. The main domains of the conversation were: changing relationships, staying in touch, staying close and showing that they care. The results of the study showed that the changes in relationships were both positive and negative, and many described the process of getting to know real friends. Staying in touch with peers through communication, technology, and the current state encouraged proximity, while distance, treatment-related limitations, and friends' discomfort were obstacles. Adolescents defined support friends as those who were here for them, often contacting them and giving them gifts. Despite the changes in relationships, adolescents with cancer long to connect with peers during treatment and perceive that peers without

cancer provide them with valuable support. Promoting connectivity with peers without cancer during treatment can be a promising future direction for alleviating social disruption and promoting quality of life.

In 2020, Sisk B., Fasciano K., Block S., Mack J. published the results of a study aimed at examining the impact of cancer on adolescents and young adults on their social development, in particular education, employment and financial independence. The main tool for data collection was a questionnaire, the study involved 145 patients (AYA) aged 15-29 years. Patients completed the questionnaire 4-12 months after diagnosis. The questionnaire assessed areas such as independent living, school studies or employment. The results of the study showed a higher degree of dependence on parents in the area of housing. About 50% of patients lived with their parents before the diagnosis of cancer, and by 4-12 months it was already 61%. In the field of education, 38% of patients did not attend school before cancer diagnosis, and after diagnosis this proportion increased to 61%. A similar decline was recorded in employment, where 30% of patients did not work before cancer diagnosis and increased to 49% after diagnosis. The results of the study showed that in many AYA patients, cancer diagnosis leads to less involvement in school and work activities and reduced financial independence from parents. Professionals working with this group should therefore ensure timely and ongoing discussion with patients about the potential impact of cancer on their lives, and thus ensure prevention and early intervention.

Psychosocial image of an individual with oncological disease

Oncological disease causes horror, fear, anger and helplessness in most of us. Its manifestations and treatment affect even the most intimate areas of an individual's life. Raudenská, Javůrková (2011) consider oncological disease as a psychosomatic disease that is the result of psychosocial stressful situations or psychosocial risk factors. Diagnosing a life-threatening illness is extremely stressful. This intense crisis begins with the diagnosis itself, while during the chronic phase, the sense of crisis may subside, new stressors, including treatment, emerge, meeting the vital requirements of the disease and often persistent uncertainty. Stress itself can be chronic at this point, and in the terminal phase, dying alone is an insurmountable crisis. These factors create acute stress in an individual, which can manifest itself in physical changes and reactions. The range of physical responses to stress can include insomnia, headaches, dizziness, fatigue, nausea, and various other physical ailments. Mentally, this can cause individuals to be moody, aggressive, explosive, apathy and many more reactive (Doka, 2014).

Individuals with cancer form a specific group of pedagogy for the physically handicapped, the sick and the weak. For this reason, according to Renotíerová (2003 in Harčaríková 2011), and Vančová 2013, 2014, 2016 (in Harčaríková 2016) the content of pedagogy of individuals with physical disabilities, illness, and impairment is the education and training of children, youth and adults with physical disabilities, illness, and impairment, focused on their socialization or resocialization and overall preparation for life in changed and often difficult living conditions. Due to the impact of the disease, individuals with cancer are more prone to various mental, communication, social or emotional difficulties, which can adversely affect their overall experience and the environment in which they live. An individual with an illness may experience fear, anger, anxiety, helplessness or, due to social isolation, unnecessary or abandonment. Such conditions can be experienced by individuals at all stages of disease survival from screening, through active treatment, cure of the disease, or to the final stage of the disease, when the individual succumbs to the disease. According to psychiatrist Valentine (2015), serious social-emotional consequences of the disease include anxiety disorders, mood disorders, cognitive disorders, substance abuse and personality disorders. The following changes in the psyche are characteristic of an individual with a disease to which the disease brings significant lifestyle limitations:

- narrowing of the thought horizon of consciousness - the patient lives by the disease, deals with everything related to it and other areas of his life are subject to it,
- regression - behavior that does not correspond to the age, mental and emotional maturity of the patient, characterized by, for example, emotional lability, defiance, increased need for attention and egocentrism,
- a decrease in self-esteem and a decrease in self-esteem as a result of being aware of one's own limitations (Vymětal, 1994 in Andrášiová, 2008).

According to the National Health and Medical Research Council (NHMRC), oncological disease, as well as the treatment itself and the associated social isolation and mental change, can also have a serious impact on an individual's perception. Living with cancer can affect the concept of self, social perception, social self, perception of oneself as a member of society and the concept of self-perception in the eyes of others. Illness and treatment bring with them side effects that can weaken

an individual's sense of physical attractiveness and thus worsen the individual's image and self-esteem. Doka (2014) states that body image is associated with sexuality, gender identity, self-perception and self-esteem, so the effects of the disease on body image can be very strong. Self-esteem - self-evaluation can be characterized as a general assessment of self - perception, one 's qualities and abilities. It is very important to realize that body image and self-esteem perception has a subjective reality and the image of one's own body may seem much more negative to the individual than it actually is. Self-esteem and self-concept are essential for a person's mental and physical health. Selfconcept, the perception of oneself, one's own ideas about one's abilities and qualities, helps an individual to find happiness in life and to cope better with disappointments and changes. The inability to gain a positive view of oneself (self-image) is the biggest obstacle in the treatment of diseases (Kozierová, 1995). treatment and care to increase the overall quality of life of an individual with oncological disease. Maintaining a positive self-assessment despite cancer positively affects an individual's overall quality of life and length of life. Oncological diseases causes changes in the individual's physical appearance (sudden weight loss, hair loss after chemotherapy, yellowing, abdominal growth, swelling), impairs the integrity of the body and its functions, as a result of hospitalization, the individual loses his intimacy, often undergoes painful, unpleasant procedures, has difficulties with the disease and has difficulty playing roles, whether in the family, at work or in society. These factors affect the overall self-esteem of the individual, as an important aspect of self-assessment is the perception of the results achieved, whether work or social, and this affects the overall condition of the individual and his ability to cope with the disease.

In 2007-2008, a survey was conducted in the United States on the psychosocial impact of cancer on newly diagnosed adolescents and young adults (AYA) cancer patients. The authors and principal investigators of this survey are Bellizzi K., Smith A., Schmidt A., Keegan T., Zebrack B., Lynch Ch., and colleagues. The survey was conducted through questionnaires as well as telephone interviews, with 523 patients aged 15-39 years participating in the study. The aim of the study was to examine the positive and negative impact of cancer on the psychosocial survival of individuals during adolescence and young adulthood. The results of the survey showed that cancer diagnosis has a negative impact on the financial area, body image, life control, work plans, partner relationship and child planning. The positive impact of cancer has been identified in

terms of future plans, goals and relationships. There were no significant differences between the age categories. The conclusions of the survey suggest that in the future it will be necessary to improve the intervention focused on financial assistance, problems with one's own image, partnerships and educational goals of adolescents and young adults.

Cancer poses particular challenges for adolescents and young adults during or immediately after puberty, as it is a vulnerable phase of life in which peer contact is particularly important. However, if social activities and the opportunity to participate in everyday life are significantly reduced as a result of the disease and treatment, this can have far-reaching consequences. A study by Roick J. and Schepper F., conducted in Germany in 2020, identified problems in the social participation of children, adolescents and young adults with cancer. In the study, the authors analyzed the results of a previous study and identified the impact of cancer in childhood, adolescence and young adulthood on social participation in the school and family environment. The authors compiled the results of a previous study on social participation into four areas of possible change and illustrated each of them with one case study. The four areas were family, school, recreation and social relations. The results of the study showed a negative impact of cancer and its treatment on social relationships, for example in long-term isolation and school dropout. The results also identified a long-term negative impact of cancer and treatment that may persist after cure. The results also pointed to the fact that limiting social contacts has a negative effect on the mental well-being of patients, but in some cases, especially in individuals with cancer over the age of 15, the relationship between peers after cancer diagnosis has strengthened. The present study has provided a number of useful conclusions and recommendations for practice.

- The results of the study highlighted the importance of preventing social isolation and maintaining patients' quality of life. Psychosocial interventions to improve social opportunities should focus on vulnerable patients, in order to avoid social isolation, and to create structures that allow patients to stay in touch with friends and participate in teaching as much as possible during their hospital stay.
- Teachers can be a unique resource in promoting school reintegration, helping children to return to school and integrate into the classroom, thus preventing bullying and stigma. Physicians should integrate the psychosocial team and the hospital school into treatment at an early stage.

- Physicians should educate parents about the possible limitations of treatment so that they can provide children with as much care as necessary, but also as much autonomy as possible. The needs of children must always be taken into account so that excessive protection and a hasty return to the daily lives of parents are not forced.

In a pilot study in 2012, the authors Hatcherm H., Lack C., Walsh C., Abbas L., Fretwell J., Dobson M.W., Goodyer I. and Alam S. at Cambridge University in the United Kingdom addressed the psychological survival and psychological needs of cancer patients (AYAs) and their families. The study involved 172 patients from the Cambridge AYA registry. Patients were asked to complete two questionnaires (SCL90 and RSQ), which focus on psychological symptoms, and then participated in a semi-structured interview. Patients' parents were asked to complete a survey and then participated in a short interview. A total of 33 patients and 42 parents participated in the study and 23 patients, 26 parents and 3 other family members took part in the interview. The results of the study identified different levels of mental anxiety in each cancer patient at some point in their cancer journey. At the same time, the study found that 51% of patients had an increased incidence of mental disorders as they got older. Patients characterized the support of family, friends, peers, support from doctors and nurses as positive factors that alleviated feelings of anxiety. Negative factors included delayed diagnosis of the disease, inadequate communication style, anxiety and a lack of appropriate psychological care and support. The results of the study pointed to the fact that cancer patients and their families prefer early diagnosis, high quality information and communication, easy access to psychological help at every stage and post-treatment help to build independence and a positive future.

Conclusion

Oncological disease and treatment itself have a number of somatic, psychosocial and other consequences that affect an individual's life, ability to communicate, socialize or regulate behavior. When working with these individuals, it is necessary to identify, analyze and then select appropriate intervention procedures.

Due to the fact that an individual in the period of adolescence and young adulthood goes through a period characterized by personality changes, the creation of their own identity, building personal and professional life, it is necessary to pay intensive care at all levels and in all areas. In the areas of special pedagogy, medicine, psychology and

social. The aim of this care should be to maximize the negative impact of cancer and treatment on the individual's personality and to integrate him or her into society. Maintaining, building or supporting the development of his communication skills, social skills, cognitive functions or healthy psychosocial development.

References

1. Andrášiová M. Psychologické aspekty paliatívnej starostlivosti [Internet]. [cit. 2021-01-31]. In: Paliatívna medicína a liečba bolesti, č. 2, 2008, p. 77-79. Available from: <http://www.solen.sk/pdf/b7282b893738cdfa385c408bfb069863.pdf>
2. Bartošíková I. O syndromu vyhoření pro zdravotní sestry. Brno: Národní centrum ošetrovatelství a nelékařských zdravotnických oborů. Brno; 2006. ISBN 80-7013-439-9
3. Bartůňková S. Stres a jeho mechanismy. 1 vyd. Praha: Karolinum, Učební texty Univerzity Karlovy v Praze; 2010. ISBN 978-80-246-1874-6
4. Bellizzi K, Smith A, Schmidt A, Keegan T, Zebrack B, Lynch Ch, et al. Positive and negative psychosocial impact of being diagnosed with cancer as an adolescent or young adult [Internet]. *Cancer*. 2012 Oct 15;118(20):5155-62. doi: 10.1002/cncr.27512. Available from: <https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.27512#>
5. Benáček V, Reichlová N. Ekonomická dimenze kvality a udržitelnosti života. Česká republika v Evropskéunii: proměny a inspirace. 1 vyd. Praha: CESES FSV UK; 2007. ISBN 978-80-239-9568-8
6. Činovský K, Blusková J, Škodáček I. Zmeny psychických stavov a ich prejavy v interakcii s psychickou záťažou [Internet]. *Psychiatria*. 9. č.1. s7-12. 2002. [cit. 2021-01-31] Available from: https://www.researchgate.net/publication/266065993_Zmeny_psychickyh_stavov_a_ich_prejavu_v_interakcii_s_psychickou_zatazou
7. Doka, KJ. Counseling individuals with life-threatening illness. 2nd ed. New York: Springer Publishing Company, LLC; 2014. ISBN: 978-0-8261-9582-1
8. Dragomirecká E, Bartoňová J. WHOQOL-BREF.WHOQOL-100. WHO Quality of Life Assessment. Příručka pro uživatele české verze dotazníků 74kvality života Světové zdravotnické organizace [Online]. Praha : Psychiatrické centrum. 2006. Available from: https://www.researchgate.net/publication/40351032_WHOQOLBREF_WHOQOL100_World_Health_Organization_Quality_of_Life_Assessment_prirucka_pro_uzivatele_ceske_verze_dotazniku_kvality_zivota_Svetove_zdravotnicke_organizace
9. Eiser Ch. Children with cancer: The quality of life. Library of Congress Cataloging-in-Publication Data. 2004. ISBN: 080583544X
10. Epelman CE. The Adolescent and Young Adult With Cancer: State of the Art - Psychosocial Aspects. *Curr Oncol Rep*. 15:325-331. 2013. DOI 10.1007/s11912-013-0324-6.

11. Fladeboe K, Walker A, RosenbergaLynn K. Relationships Between Adolescents with Cancer and HealthyPeers: A Qualitative Study. *Journal of Adolescent and Young Adult Oncology* Vol. 10, No. 5. p.555-561. Available from: <http://doi.org/10.1089/jayao.2020.0133>
12. Harčaričková T. *Pedagogika telesne postihnutých*. Bratislava: IRIS; 2011. ISBN 978-80-89238-57-6
13. Harčaričková T. *Základy pedagogiky telesne postihnutých, chorých a zdravotne oslabených*. Bratislava: IRIS; 2016. ISBN 978-80-89726-81-3
14. Hatcher H, Lack C, Walsh C, Abbas L, Fretwell J, Dobson MW, Goodyer I, Alam S. Psychological study of adolescent and young adult (AYA) cancer patients and their parents throughout and beyond their cancer treatment: A pilot study. *Journal of Clinical Oncology* 30, no. 15_suppl (May 20, 2012) 9589-9589. DOI: 10.1200/jco.2012.30.15_suppl.9589
15. Kaal, S., Lidington, E., Prins, J., Jansen, R., Horst, E., Servaes, P., Graaf, W. and Hudson, 2021. Health-Related Quality of Life Issues in Adolescents and Young Adults with Cancer: Discrepancies with the Perceptions of Health Care Professionals. *Journal of ClinicalMedicine* [Online]. Available from: <https://www.mdpi.com/2077-0383/10/9/1833>
16. Kozierová B, Erbová G, Olivierová R. *Ošetrovatelstvo 1 a 2*. MARTIN: OSVE-TA; 2004, 1995. 1474 p. ISBN 80-217-0528-0
17. Křivohlavý J. *Jak zvládat stres*. 1.vyd. Praha: GradaPublishing; 1994. 192 p. ISBN 80-7169-121-6
18. Křivohlavý J. *Psychologie nemoci*. Praha: GradaPublishing; 2002. ISBN 80247-0179-0
19. Kubler-Ross E. *On Death and Dying*. New York: Scribner; 1997.
20. Matějček, Z. *Psychologie nemocných a zdravotně postižených dětí*. Jinočany: H&H; 2001. ISBN 80-860229-2-7
21. Nagyová K, Harčaričková T. Siblings of children with oncological illness [Online]. *Ad Alta: Journal of Interdisciplinary Research* . 2019;9-2: 220-227. Available from: http://www.magnanimitas.cz/ADALTA/0902/papers/A_nagyova.pdf
22. Nakonečný M. *Motivace chování*. 3., přeprac. vyd. V Praze: Triton; 2014. ISBN 978-80-7387-830-6
23. Raudenská J, Javůrková A. *Lékařská psychologie ve zdravotnictví*. Praha: GradaPublishing; 2011. ISBN 978-80-247-2223-8
24. Roick J, Schepper F. Soziale Teilhabe von Kindern, Jugendlichen und jungen Erwachsenen mit Krebs. *Der Onkologe*. 2021; 5: 492-496. DOI: <https://doi.org/10.1007/s00761-020-00893-5>
25. Sisk BA, Fasciano K, Block SD, Mack JW. Impact of cancer on school, work, and financial independence among adolescents and young adults. *National Center for Advancing Translational Sciences*. Grant Number: UL1 TR002345. Cancer (0008543X), July 2020. DOI: <https://doi.org/10.1002/ncr.33081>

26. Spear HJ, Kulbok PA. Adolescent Health Behaviors and Related Factors: A Review. [Online]. Public Health Nursing. 2001;18-2: 82-93. Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1525-1446.2001.00082.x>
27. Stodůlková A, Kopřivová J. Faktory vedoucí ke změně životního stylu u žen s nadváhou. In Kolektiv autorů - Nové poznatky v kinantropologickém výzkumu: Soubor referátů ze semináře pořádaného v Brně, pp. 190-192). Brno, Masarykova univerzita. [Online]. 2003. Available from: <https://www.cceol.com/search/article-detail?id=808081>
28. Tschuschke V. Psychoonkologie: psychologické aspekty vzniku a zvládnutí rakoviny. Praha: Portál; 2004. ISBN 80-7178-826-0
29. Vasilíková L. Vplyv liečby na kognitívne funkcie a kvalitu života u pacientov s karcinómom semeníkov. Klinická onkologie. ročník: 29, číslo: 4. [Online]. 2016. Available from: <https://www.linkos.cz/casopisklinicka-onkologie/2016-08-15-4/>
30. Vymětal Š. Krizová komunikace a komunikace rizika. Praha: Grada, Psyché; 2009. ISBN 978-80-247-2510-9
31. Valentine A, Shinn EH, Lenihan DJ, Urbauer DL, Basen-Engquist KM, Palmero L, et al. Impact of cardiovascular comorbidity on ovarian cancer mortality. Cancer Epidemiol Biomarkers Prev. 2013; 22(11):2102-2109.
32. Valentine A, Shinn EH, Jethanandani A, Basen-Engquist K, Fellman B, Urbauer D, et al. Depression and oropharynx cancer outcome. Psychosom Med. 2015; 78(1):38-48.
33. Weisman A. Coping with cancer. New York, NY: McGraw-Hill. Weisman; 1979. ISSN 0534-0276
34. WHO. Constitution of the world health organization. [Online]. 2006. Available from: http://www.who.int/governance/eb/who_constitution_en.pdf
35. Vančová A, Biščo Kastelová A. The current research view on the issue of special educational diagnostics, special educational counselling and early intervention for children with disabilities in Slovakia [online]. In: INTE 2016: Proceedings book, 2016; 4:604-613. ISSN 2146-7358
36. Vančová A. Interdisciplinarita a inovácie v rehabilitačných, korekčných a terapeutických postupoch špeciálneho pedagóga so zameraním na deti raného a predškolského veku s poškodením CNS. In: Možnosti a limity výzkumu ve speciální pedagogice. -Olomouc : Univerzita Palackého v Olomouci; 2013. p. 103-123. ISBN 978-80-244-3930-3
37. Vančová A. Inovácie v teórii, metodológii a praxeológii pedagogiky mentálne postihnutých. 1 vyd. Ostrava : Ostravská univerzita, Pedagogická fakulta; 2014. 200 p. ISBN 978-80-7464-673-7



THE IMPACT OF CYSTIC FIBROSIS ON THE FAMILY OF AN INDIVIDUAL WITH THIS DISEASE

Katarína Kelemenová, Terézia Harčaričková

Abstract. Cystic fibrosis is an incurable and life-limiting disease. Because it affects several organs in the body, it is often referred to in the literature as a multi-organ disease. The consequences of the disease also have a significant impact on the quality of life of not only the individual with the disease but also their family. In this paper, the authors present their research findings in which they present the impact of the disease on the family of an individual with the disease.

Keywords: cystic fibrosis, individual with cystic fibrosis, quality of life, family.

Cystic fibrosis

Cystic fibrosis is often referred to as one of the most common genetic life-shortening diseases. Several factors influence its occurrence. One of the most prominent is incidence. In general, the incidence of the disease is highest in the Indo-European population. Several authors in their studies report that its prevalence in Europe averages 1:2500 [7; 9]. As some research studies [7; 9; 10; 12] indicate, Europe is a hotspot for cystic fibrosis. On average, one in 2500 to 4500 live births is born with it.

| Country | Average incidence | Country | Average incidence |
|-----------------------|-------------------|--------------------|-------------------|
| Ireland | 1:1 353 | Denmark | 1: 4 700 |
| United Kingdom | 1: 2 381 | France | 1: 4 700 |
| Czech Republic | 1: 2 736 | Netherlands | 1: 4 750 |
| Germany | 1: 3 300 | Portugal | 1: 6 000 |
| Spain | 1: 3 750 | Finland | 1: 25 000 |
| Italy | 1: 4 238 | | |

Table 1 Prevalence of CF in some European countries (Mirtajani et al., 2017)

Since Slovakia is located in the central part of Europe, the incidence of cystic fibrosis averages around 1:2500. The European Registry of Cystic Fibrosis Patients reports that 308 CF patients were registered in the Slovak Republic in 2018. 42.7% of them were children and the remaining 57.3% were adult patients. The average age of diagnosis of CF in 2018

was 9.6 months. Pancreatic enzymes were taken by 87.4% of patients [3]. Foltánová [4] reports that there are approximately 250,000 CF carriers in Slovakia, which represents 3-4% of the total population of Slovaks. Therefore, every 400th marriage may be a partnership of two carriers, which poses a potential risk of giving birth to a sick child.

Family and cystic fibrosis

As Nagyová and Harčariková [11, 689] report, *„The expectation and birth of a child are one of the most important moments in life for a parent. A child presents for the parents a continuation and fulfillment of their wishes since most parents expect that their child will be perfect. At present, when parents learn that their child is suffering from a serious or even incurable disease, it is an enormous shock, especially as their ideals and ideas for their child are demolished“*. Some parents-to-be are willing to admit this fact quite quickly, but for some, it can take a very long time. Usually, they go through phases such as denial, anger, blaming themselves for depression. The different phases can be in a different order and their duration is very individual [8] If cystic fibrosis is not diagnosed correctly or the process takes too long, parents experience stress, anger, or even depression and anxiety. One of the worst feelings can be ignorance and helplessness. They don't know the illness, they don't know what will happen to the child and most importantly they can't help the child [8]. Diagnosing any illness in a child always puts a very heavy psychological and physical burden on the child's family and immediate surroundings. In the case of a chronic incurable disease, in most cases, it will change their way of life. The whole process, from the first clinical suspicions, is accompanied by stress. Gradually, this factor gets into everyday activities. It can even develop into chronic stress [6]. One possible way to relieve stress and help the family is to raise their awareness. Information about their child's current health status, describing examinations, treatments, and especially the actions they can take to help their child, can help parents overcome this stressful situation [8]. One of the first pillars of proper socialization for an individual with CF is to be accepted by their own family. Since the family is the first social community in which one finds oneself, the most important thing for a child with CF is how those closest to him/her feel about his/her illness. An incurable disease such as cystic fibrosis not only affects the sufferer but because it is congenital and diagnosed relatively early, it changes the life of the parents in particular. Often this change is associated with leaving employment to care for a sick child, which, together with the new financial obligations

associated with the child's treatment, can negatively affect the family's economic stability [6]. Cywes et al. [2; 5] report *"Most studies agree that patients and their parents have been subjected to tremendous stress resulting from cystic fibrosis as a chronic disease. Nevertheless, many patients and their families were able to sham without observable dysfunction. The central message seems to be that families need to foster strengths and coping mechanisms developed to prevent family dysfunction"*. The family also plays an important role in the treatment regimen of an individual with CF. For example, it can be of considerable help in regular physiotherapy. Vančová means [13] special educational support and intervention may help very well, stimulation of psychoemotional development is useful. Parents, grandparents, or siblings can help prepare aids or even exercise with the person. This can motivate the child with CF to perform better and enjoy exercise (Hopkin, 1998). The roles of parents of a child with cystic fibrosis according to [8] include:

- managing your own emotions and feelings,
- searching for information about the disease,
- coping with a change in lifestyle,
- coping with the treatment regimen,
- Teach a child with CF independence and responsibility,
- decide what information the child will have about CF and when they will find out,
- accompany your child for examinations and medical treatment,
- finance all your child's needs.

Siblings of individuals with cystic fibrosis are often forgotten, but they too are part of the family. Their daily life, and their personality, are affected by their ill sibling. They watch their brother or sister suffer daily. The schedule is adapted to their sibling's treatment regimen. Parents may treat their children differently. The sick child is often the center of attention. They try to protect and care for him or her as much as possible. An intact child may therefore live in the shadow of their sick sibling. Parents may ask him for help or require him to be more independent. Many siblings of children with cystic fibrosis prefer not to talk about their disease. One of the few positives is their greater level of empathy and better ability to cope with stressful and stressful situations [8]. Caring for a child with cystic fibrosis is challenging. Other members of the immediate family, such as grandparents or aunts and uncles, can be of help to parents and siblings. It may be helpful to involve them in some household activities such as caring for the home, cooking, shop-

ping, caring for healthy siblings, or simple activities related to the child with CF [1].

Research problem

Cystic fibrosis is an incurable multi-organ disease that affects the daily life of its carrier in all its areas. As we consider it important to report on other impacts of cystic fibrosis, we have chosen to investigate the impact of cystic fibrosis on the quality of life of individuals with CF in the social and educational domains as our research problem.

Methodology and research methods

For our research, we have chosen a qualitative research methodology. We used the semi-structured interview method to gather information. We had prepared questions in advance. We conducted the interviews more freely with individual participants, giving them space to express themselves on the question asked. We then asked questions in a way that would elicit all the information we set out to find out. If a participant provided a more extensive answer, we omitted some questions. Conversely, if his or her answer did not contain all the necessary information, we asked follow-up questions. We consider the advantage of this method to be that it is easier to create a positive atmosphere during the interview and that the interview is more free-flowing. On the other hand, we perceive the different structure of the individual interviews and in some cases extensive answers as negative. The interviews with the underage participants always included at least one of their legal representatives. In these cases, we considered it appropriate to divide the interviews into two parts. In the first part, we spoke with the child with CF in the presence of a legal guardian, and in the second part, we spoke only with the legal guardian. All interviews were conducted via video chat, which contributed greatly to the positive atmosphere and the participants' willingness to answer questions. We also consider the main advantages of this format to be that it is less time-consuming to organize and to ensure that individuals with CF are not unnecessarily exposed to unwanted bacteria or viruses on the way to the interview or during face-to-face contact. Online interviews were audio-recorded and then transcribed into written form. The written form was necessary for further processing of the information. We used the content analysis method to process the data. We read the data repeatedly, analyzed it, and then meaning categories emerged. We categorized the individual responses of the research participants and then evaluated them.

Selection and characteristics of research participants

For our research, we have chosen a criterion type of research sample selection. We considered the following as the main criteria that all participants had to meet:

- diagnosing cystic fibrosis in a participant,
- age between 5 and 25 years,
- active education of an individual at an educational level (kindergarten, primary school, secondary school, university).

Participants were contacted through several patient organizations or CF centers. All enrolled participants volunteered to participate in the study and were informed in advance of the purpose, conduct, and objectives of the research. A total of 7 individuals with cystic fibrosis aged 5 to 21 years participated in our study. 5 of the participants were not of legal age; therefore, at least one legal guardian was always part of the interview. The research sample included 5 females and 2 males. We consider it positive that individual participants live and study in different regions of Slovakia. Therefore, we assume that the information on which they agree can be better generalized for the whole territory of the Slovak Republic.

Interpretation of the obtained data concerning the meaning categories

Based on the nature of the information gathered, we have created several categories of meaning. The following meaning categories emerged from the interviews we conducted:

- the impact of cystic fibrosis on the personality of individuals with CF
- the impact of cystic fibrosis on the family of an individual with CF
- the impact of cystic fibrosis on the socialization of individuals with CF
- the impact of cystic fibrosis on the education of individuals with CF
- the impact of cystic fibrosis on the leisure time of individuals with CF

Because we divided some interviews into two parts, the child interview and the parent interview, we have described the data collected separately. In two of the interviews, the parents were not present, so we will only report one response from the participant. Two of the participants in our research are underage siblings. We will interpret the siblings' responses separately, but from a parent's perspective, only one response will yield a response that describes both siblings. The research participants' responses reported in the following subsection are authentic and verbatim. To increase the clarity of the following subchapter, we have

indicated the responses of the mothers of the underage research participants with (m) after their initials. Given the thematic focus of the paper, we will further address a category of meaning exclusively: **the impact of cystic fibrosis on the family of an individual with cystic fibrosis.**

The impact of cystic fibrosis on the family of an individual with cystic fibrosis - an analysis of research findings

The family is the first social unit into which a person is placed immediately after birth. He grows up in it and it accompanies him all his life. The mutual influence of chronic illness and family is therefore unmistakable. The presence of a member with cystic fibrosis in the family can change the entire functioning of the family from its very foundations. From another perspective, a loving and supportive family can make a significant contribution to better coping with the disease or even to improved health. Seven participants from six families participated in our research. Two of these participants are siblings who both have cystic fibrosis and live in the same household.

***M.D.(m):** There are four of us, me, my husband, and two kids. Both kids have CF.*

We consider it a positive that the families of all participants are complete. Only one of these families has only one child. As the mother herself stated in the interview, they are afraid that their other child would also have cystic fibrosis.

***L.G.(m):** Well, there are three of us. We don't want another child because we're afraid that it would be such a risk. Even so, we have a lot to do to make sure that the little one doesn't get sick and another child would be...*

In four families they have two children. One family has three children, the oldest daughter has CF and the two younger daughters are in foster care. None of the participants or parents confirmed the presence of cystic fibrosis in previous generations of their family. The family is also influenced by the place in which it lives. Of the six families of our research participants, three families lived in a village setting and three families lived in an urban setting as well. We consider the diagnostic process and the short period afterward to be the most challenging period for the family about cystic fibrosis. The mothers of the research participants described this period with terms such as shock, fear, little information, lack of knowledge of the disease, new rules, changes, new regimens, etc.

***M.D.(m):** The beginnings were horrible, scary, and disastrous for me as a mother. I have been healthy all my life. My husband had all the childhood*

illnesses, but some diagnosis or something was also not with them. So the beginnings were very difficult because I'm with her...But we learned to live with it.

Jacobs [8] describes the same feelings when he mentions the stages of coming to terms with chronic illness in parents of a chronically ill child. He reports that parents may experience shock, fear, or even depression and anxiety. In the past, this period was even more challenging due to the late and complicated diagnosis of the disease. We consider the introduction of nationwide newborn screening for cystic fibrosis to be a great positive, thanks to which the process of diagnosis of cystic fibrosis has been significantly shortened. Currently, a child with suspected cystic fibrosis has to undergo several tests and examinations. His parents accompanied him through all these steps. The tests themselves, and especially the waiting for the results, are very mentally demanding for them.

K.H.(m): ...and they found it right at the time of the collection in the maternity ward when they took the drop from the heel, so then actually it was suspected, and then we went for a sweat test, which actually came out negative the first time and then positive twice and then it was done genetically... Genetics from the blood where it was confirmed.

Mothers described the period shortly after diagnosis as very challenging. Finding out information about cystic fibrosis and getting used to the new living conditions was complicated for their families. Challenging for them was the need to increase hygiene in the home or to limit socializing with other relatives and friends.

L.G. (m): That was terrible. P.G. Nobody could kiss me, even I gave him my first kiss when he was about six months old. I just did that with a terrible conscience that I hoped I wouldn't hurt him.

We think that the process of finding out information about cystic fibrosis is still too complicated even today. Through interviews, we found that parents of children with cystic fibrosis were poorly informed. Doctors only provided them with partial data. They learned much more through their search and mutual help. One participant stated that she had searched for information on the internet, but the data she found did not reflect her current health status but rather described a more negative prognosis.

B.B.: What I did do wrong, I went to the Internet when I started to understand it. Because I was also ashamed and just and stuff and that age. And well there it's so described that not well. Either it's very strictly or it's written like

a rose garden that you're sick and you're coughing and I don't know what and that's it.

Cystic fibrosis is a disease that affects members of the immediate family especially psychologically. In their answers, mothers describe a feeling of fear or guilt, which is mainly caused by the fact that they are carriers of the disease.

L.G.(m): *I used to have tests done as well, because every time he had a bacteria, I would check to see if it was from me by any chance.*

Similar information is also reported by Hromková et al. [6, p. 22] when she writes “Chronic diseases are a great psychological burden not only for the carrier but also for his/her surroundings, especially for the family and family members with whom he/she lives in the same household.”

In addition to the impact in the psychological sphere, cystic fibrosis also changes the family's economic situation. In several responses, mothers reported that they had left their jobs to attend to their sick children. The father became the sole breadwinner.

L.G.(m): *It's going to be quite a challenge in my opinion, and not just financially, but just overall, because we're quite burdened financially because we're buying these kids these plus vitamins that the insurance companies don't reimburse so that they're better off.*

The difficulty of the treatment regime does not lie solely in the complicated time organization of activities. Hygiene measures, medicines, devices, and various rehabilitation activities are also financially demanding. One of the mothers confirmed that they receive the allowances we mentioned in subsection 2.2. We think that the amount of financial support is insufficient and should be reconsidered.

The immediate family undoubtedly includes siblings of the individual with cystic fibrosis. Their relationships with each other may take different forms. Two of the research participants are siblings. Their mother individually described them as opposites of each other. But she described their relationship as a “perfect team”.

M.D.(m): *On the other hand, the kids complement each other, and because they are used to being together all the time, of course, they also fight and play. But also as a team, they are perfect. As a mother, I have to say that as a team they are perfect.*

We find it positive that our research did not confirm the facts reported by Jacobs [8]. Namely, he mentions jealousy between siblings, overlooking a healthy sibling, or placing too much responsibility. We can

also include people such as grandparents or families siblings of parents in the family. Cystic fibrosis is also specific in that it is necessary to limit socializing and follow a strict hygiene regime. In her response, one participant stated that these conditions were the ones that caused conflicts in their family and complicated relationships.

B.B.: The rest of the family was like that in the beginning, they didn't understand, because it wasn't known, they weren't around me all the time, so some of them didn't even believe it, because that's the way it was, that's the way it was.

We suggest that this may also have been due to a lack of awareness among members of the extended family.

The impact of cystic fibrosis on the family of an individual with cystic fibrosis - research findings

An important aspect influencing an individual's personality is also his or her relationship with the family. All of our participants were part of complete families, which positively impacted their health and socialization. We also consider it important to note the positive impact of the presence of a sibling in the family of an individual with CF. He or she can represent for the ill person a kind of connection with the "healthy" world. None of the participants reported not having a good relationship with a sibling. On the contrary. Younger participants described that they share games with their brother or sister. Also through such play, the chronically ill individual can relax and not think about his or her health condition. Given that some of our participants lived in the village and some, on the contrary, in the city, we can conclude that the place of residence can also have an impact on the family. Participants living in the village described positive relationships with the neighborhood and the efforts of other citizens to help them. We have found that the most challenging time in the life of a family of an individual with CF is the diagnostic process and the short period afterward. This period is mainly characterized by fear of the new, lack of information, and concerns about the future. The most serious negative impact during this period is the lack of information and the complicated support system. Cystic fibrosis has a significant impact not only on the psyche of the carrier but also on the psychological survival of those closest to him or her. The most frequently described emotions were fear, guilt, or helplessness. We consider it positive that none of our participants experienced psychiatric illnesses such as depression or anxiety. An important factor that affects the family of an individual with CF is the financial burden. Some

mothers reported that they left their jobs to care for their chronically ill children. Thus, the father became the breadwinner of the family. Families of a child with CF can receive some financial benefits, but the amount is not sufficient to cover even the basic needs related to the medical and hygienic-epidemiological regime. Some participants or their mothers also described relationships with extended family members. In some cases, these members were supportive, for example, they were active in the kindergarten, which helped better socialization of the child with CF. However, in two cases, they also described negative aspects of these relationships, such as a lack of understanding of the disease based on a lack of information.

Family of an individual with cystic fibrosis - recommendations

Based on the above findings, we make the following recommendations to the family of the individual with cystic fibrosis:

- To create a home environment for the individual with cystic fibrosis that is conducive to optimal development and treatment.
- To financially provide for all medical needs of a minor individual with CF,
- Actively supervise his treatment regimen.
- Teach individuals with CF to self-manage their treatment regimen and other measures.
- Provide emotional and psychological support.
- Proactively inform the educational facility of the individual with CF's condition and specify any specific conditions and accommodations he or she needs.
- Communicate regularly with the educational establishment.
- Participate in the provision of physical accommodations when not provided by the educational institution.
- Inform the class teacher of extended planned absences.
- In the event of a major disease outbreak at a school facility, do not send a student with CF to school.
- Involve other family members, such as siblings or grandparents, in the care of the individual with CF.
- Support the interest activities of individuals with CF.
- Organise activities to help improve the health or socialization of the individual with CF, such as family outings or joining sports activities.

Conclusion

In the research we conducted, we also sought to find out information about the impact of cystic fibrosis on the family and family environment

of the individual with cystic fibrosis. We consider it positive that the participants did not report the occurrence of psychological problems, whereas the literature suggests that they may occur. In our opinion, the most important findings of our research are the information about the psychological and economic impact of cystic fibrosis on the family of an individual suffering from it. In conclusion, most of the theoretical information has been confirmed in practice through research. However, we believe that the manifestations and impact of cystic fibrosis are highly individual and therefore need to be considered for their validity for each individual with cystic fibrosis individually.

References

1. A guide to cystic fibrosis for family, whanau a friends. New Zeland: Cystic Fibrosis NZ; 2018.
2. Cywes, S. et al. The psychosocial impact of cystic fibrosis. SA Medical Journal. 1984; 65:526-530.
3. European Cystic Fibrosis Society. Living longer with Cystic Fibrosis. 2018.
4. Foltánová T. Nová kauzálna liečba cystickej fibrózy: Tentokrát pre oveľa väčšiu skupinu pacientov. In: Lekárske listy. 2016;7-8:30-32.
5. Hopkin K. Understanding Cystic Fibrosis. Jackson: University Press of Mississippi; 1998, 180 p. ISBN 9780878059676
6. Hromková M. et al. Potreby rodín s vybraným typom zdravotného postihnutia. Trnava: Fakulta zdravotníctva a sociálnej práce Trnavskej univerzity v Trnave; 2020. ISBN 978-80-568-0341-7
7. Jakubec P. Cystická fibróza. Interní medicína pro praxi. 2006; 5:235-239.
8. Jakobs K. Cystic Fibrosis and Family. In: Thomson A et al. Cystic fibrosis the facts. Oxford: Oxford University Press; 2008. p.168-178. ISBN 978-0199295807
9. Kayserová H. Cystická fibróza (1. časť). Via Practica. 2007; 4(3):128-132.
10. Mirtajani S et al. Geographical distribution of Cystic Fibrosis. The past 70 years of Data Analysis. In Biomedical and Biotechnology Research Journal. 2017;12:105-112.
11. Nagyová K, Harčaríková T. Problems of families with a child with an incurable disease in the context of special education. In: CBU International conference on innovations in science and education. Prague, Czech Republic; 2016.
12. Scotet V et al. The Changing epidemiology of Cystic Fibrosis: Incidence, survival, and impact of the CFTR gene discovery. Gene. 2020; 11:6.
13. Vančová A. Interdisciplinarita a inovácie v rehabilitačných, korekčných a terapeutických postupoch špeciálneho pedagóga so zameraním na deti raného a predškolského veku s poškodením CNS. In: Možnosti a limity výzkumu ve speciální pedagogice. Olomouc : Univerzita Palackého v Olomouci; 2013. p. 103-123. ISBN 978-80-244-3930-3



ORIENTATION AND MOBILITY OF SENIORS WITH VISUAL IMPAIRMENT – RESULTS OF RESEARCH

Jana Lopúchová, Žofia Ondráčková

Abstract. The aging process is a natural part of human existence. The aging of humanity and the increase of the population in the post-productive age bring with them many phenomena and changes, which are reflected by experts from several scientific fields. This also influences the perception of needs, interests and the way of their saturation in individuals with visual impairment in the elderly. In our scientific study, we will focus on one of the specific areas of complex care for seniors with visual impairment, namely orientation and mobility, which determines their independence, self-sufficiency and autonomy. In particular, we focus on describing the factors that influence the orientation and mobility of seniors with visual impairment, on providing the results of inquiry on the importance of newly acquired competences for them, as well as on how they perceive their possibilities and limits in the area of orientation and mobility.

Keywords: orientation, mobility, visual impairment, seniors.

Introduction to the issue

The special needs of the visually impaired are mainly determined by the type and degree of visual impairment and the age at which it occurs. However, there are always differences inherent and individual to each person. In order to adequately address the orientation and mobility needs of seniors, it is important to know how they themselves perceive it, its importance to them, how they approach the process of learning in old age, what they find challenging and problematic in the process of learning, but also what helps them overcome obstacles and what motivates them.

The aging process is accompanied by several changes, whether physiological, morphological, functional, but also aesthetic, and they affect the physical and psychological nature of the person with a significant impact on his socio-economic status. Wolf et al. (1982) or Sibgatullina et al. (2020, 2021) in this context speaks of four factors acting on each person that influence inter-individual differences in the course of ageing. These are genetic factors, health status, various circumstances in the individual's life and personality of the person. Changes involving the sensory organs are also typical of older people. For example, vision problems are mainly related to deterioration of accommodation, deterioration of visual acuity, narrowing of the field of vision, reduction of the ability to

adapt to twilight vision, slowing down of the processing of visual sensations, etc. Similarly, auditory perception gradually deteriorates with age. Seniors have particular problems with pitch discrimination in auditory perception. Even a slight hearing impairment can negatively affect the social life of the elderly (Pichaud Thareau, 1998; Stuart-Hamilton, 1999). In the area of tactile perception, there is an increase in the tactile threshold of sensitivity and a weakening of sensitivity to heat. Also, due to changes in the skin, there are relatively large individual differences in tactile perception. Changes, although not as pronounced, also occur in olfactory and taste perception.

Loss of vision or significant limitation of visual function is a challenging life situation for everyone. A person who loses his or her sight during the course of his or her lifetime or has a significant reduction in the quality of visual perception, especially in old age, is under great stress. This is a consequence of the trauma caused by the loss of sight or the significant limitation of its functions. Often they themselves speak of a life crisis, of the intractability of the situation, of the impasse, of anger, fear, anxiety and even disaster. It is a disturbing factor for a person's experience of quality of life, and two aspects are important from this point of view. One is the resilience of the individual with later vision loss - that is, their level of resilience to all the changes and influences at work. The second is how the individual copes with the situation. That is, intrinsic motivation and sufficient strength, both mental and physical, to cope with the trauma over time.

Individuals are aware of the loss of some competences that were very important to them until then, and realize that this is an irreversible loss. Compared to congenital impairment, where the child itself does not experience any particular loss, this variant is subjectively more burdensome. On the other hand, congenital visual impairment is a greater burden on the psychological development of the individual (Vágnerová, 2007).

In the process of coping with the visual impairment and the new physical and psychological state of mind, individuals must try to manage this change, find ways to continue in life, engage in activities, find ways to be independent, self-sufficient and autonomous in their decision-making. That is to say, in this period they are looking for a new meaning in life, looking for new possibilities, trying different alternatives. It is a long-term process and in seniors it is also influenced by their

physical and psychological characteristics and also by the characteristics of the senior age.

Coping with challenging life situations is different for each individual. This process can be differentiated into three main forms of coping (Gáborová, 2007; Hewstone-Streobe, 2006): problem-focused coping (behavior directed towards reducing or eliminating the threat), emotion-focused coping (efforts to change one's own experience of the stressful situation), escape-focused coping (if a person is in a stressful situation, they may decide to take an escape response, i.e. to change the environment, the conditions, or the people around them). In individuals with later visual impairment, we can observe all three forms of stress coping. When they realize that their condition is irreversible, many go through an emotional crisis. However, if they get past this stage, they gradually focus on eliminating the problematic elements. In this case, it is about overcoming ignorance of coping strategies, lack of competence in navigating the surrounding space, fear of moving independently, negative feelings of dependence, etc. Specialists or rehabilitation instructors can be of great help here.

The importance of sensory perception for orientation and mobility

Each of the senses enables us to contact some aspect of external or internal reality. Sensory perception and its integrity is a prerequisite for the training and implementation of orientation and mobility processes for the visually impaired. At the same time, we believe that the discussion about which sensory modalities are of greater importance in orientation and mobility is irrelevant in a general sense, because the importance of each modality is conditioned by the nature and character of the movement.

All the senses are involved in the perception of space, although each to a different degree. This depends on the situation, the space itself, the spatial conditions and other factors. Under normal circumstances, vision is significantly involved in receiving information from the external environment, but it inevitably cooperates with the other sensory modalities - i.e. hearing, touch, the kinesthetic sense, taste, smell, proprioception and, of course, cognition. It is only through their cooperation that we can acquire, process and store full information. In this activity, the functions of the individual sense organs complement, control or determine each other.

| SENSORY PERCEPTION | | |
|--|--|--|
| HEARING | OLFACTORY | KINESTHETIC |
| perception and recognition of sounds | Perception of smells | perception of movement |
| sound source localization | identification of the source of the smell | duration of movement |
| sound line and sound distance | identification of smell intensity | quality of movement |
| sound source identification | identification of smell types | speed of movement |
| auditory estimation of distances | estimation of distance from source of the smell | position in space |
| identification of relationships between sounds | differentiation of smells | perception of movement of people and objects |
| TACTILE | VISUAL | VESTIBULAR |
| object size perception | perception and differentiation of shapes | perception of changes in body position |
| perception of object shape | distance perception and differentiation | perception of body position in space |
| perception of temperature | perception and differentiation of object positions | position of individual body parts |
| perception of the consistency of objects | perception of brightness intensity | perception of space at rest |
| perception of pressure | visual differentiation of details | perception of body position in space |
| identification of objects | visual perception of the size of objects | distance perception |
| tactile differentiation | light perception | perception of depth |
| structure under the feet | perception of contrast | perception speed of movement |

Table 1 Overview of the types of sensory perception and the individual processes implemented by the respective sensory analyzer. Source: freely composed by the authors

All senses have an irreplaceable place in the process of orientation and mobility. However, it is essential, especially for older individuals, that their activity is systematically supported. Not least because at this age the functions of the sensory organs can be weakened by the natural ageing process.

Orientation and mobility of seniors in international research studies

The area of orientation and mobility of the visually impaired elderly is the subject of a growing number of researches, also due to the aforementioned trend of increasing prevalence of visual impairment in this age group, thanks to scientific and technical progress and new possibilities for the development of several fields of science. The orientation and mobility of older people with visual impairment has been the focus of research, for example, by Dahlin-Ivanoff and Sonn (2004), who investigated the use of compensatory aids, including aids to facilitate orientation and mobility, in individuals aged 85 years with visual impairment. Lamoureux et al. (2007) investigated the importance of rehabilitation,

which included orientation and mobility services, for participation in activities of daily living and quality of life in individuals with visual impairment with average age of 80 years. The effectiveness of a comprehensive program of services for seniors with visual impairments has also been addressed by La Grow (2004). Zijlstra et al. (2009), Ballemans, Kempen and Zijlstra (2011), Ballemans et al. (2012), Zijlstra, Ballemans, and Kempen (2012) in particular investigated the effectiveness of standardized orientation and mobility training for seniors with visual impairment in the Netherlands. In addition to the aforementioned research studies, there are many others that investigate orientation and mobility of seniors with visual impairment from different perspectives. Research by Cimarolli et al. in 2012 focused on assessing and describing in detail the specific challenges faced by older people with age-related macular degeneration. Engel, Welsh and Lewis (2000) examined the effectiveness of rehabilitation services for older people with visual impairment. A total of 70 participants took part in the research, with inclusion criteria being age of 60 years and over and the fact that the person required rehabilitation services. Research by Kuyko et al. (2004) investigated the effect of a rehabilitation program, that included orientation and mobility training, on the subjectively rated (self-reported) mobility of individuals with visual impairment. Participants were 128 visually impaired seniors with average age of 70 years who participated in a rehabilitation program at the Southeastern Blind Rehabilitation Center in Alabama.

The issue of orientation and mobility of the elderly in the field of reference of the pedagogy of the visually impaired is not only interesting and specific, but also very important. For this reason, together with Ondráčková, we also decided to carry out research and looked for answers to the questions: *How do seniors think ageing affects their orientation and mobility? What problems do they encounter in the area of orientation and mobility? Which factors are motivating for them in the area of orientation and mobility? How do seniors perceive their independence and autonomy in the area of orientation and mobility? How do seniors' orientation and mobility skills influence their social contacts?*

At the same time, we were interested in the specifics of the process of orientation and independent movement training for seniors with severe visual impairment, how the level of acquired competences in the field of orientation and mobility affects the daily activities of seniors with visual impairment, what obstacles and barriers they encounter in relation to orientation and mobility, etc.

Analysis and description of specifics and determinants of the process of orientation and mobility training in seniors with visual impairment

Orientation and mobility is an important area of an individual's life that is significantly affected by the consequences of visual impairment. Coping with orientation situations and the ability to move independently affects the psychological state of the visually impaired individual and influences their self-esteem and self-worth.

Based on the theoretical knowledge regarding the importance of orientation and mobility and its possible specifics for seniors with visual impairment, the following text describes the results of our research aimed at identifying factors/determinants that influence orientation and mobility of seniors with visual impairment and at finding out the subjective view of the seniors themselves on the given issue. Our questions were more systematically incorporated and subsequently formulated into the following research questions:

RQ1: From the perspective of seniors with visual impairments developed prior to senior age, how does aging affect the use of orientation and mobility skills/competencies?

RQ 2: How do seniors perceive the importance of acquired orientation and mobility competences for their autonomy and independence?

RQ3: What positive determinants influence the orientation and mobility of seniors with visual impairments?

RQ4: What barriers to orientation and mobility do seniors with visual impairments face?

Our study population consisted of six participants (P1-P6; four males, two females) selected by intentional sampling with predetermined criteria (age over 60 years, presence of severe visual impairment acquired in working or post-productive age, completed orientation and mobility course).

In the research, we followed the basic established methodological principles and procedures, and we adhered to research ethics at all stages. We used several methods to collect, process, evaluate and interpret the research results, especially the method of theoretical analysis of literary sources, the method of interviews (direct, individual, semi-structured). The interviews included observation of the participants during the interview, i.e. observing their behavioral expressions, nonverbal expressions, observing their facial expressions, gestures, posturing and other accompanying phenomena. To process the research results, we chose the method of in vivo coding of the participants' statements,

where Kostrub (2016) states that in vivo text coding consists in searching for meaning units in the text (which can be a word, a phrase, a sentence, or a whole paragraph) that are related to the issue under study. Subsequently, these meaning units, i.e. codes, are further linked, put into contexts and meaning categories are formed. These are then subjected to retrospective analysis and subsequent synthesis by the researcher to arrive at the final results for the evaluation of the research.

The subsequent successive merging of the units of meaning gradually yielded six resulting categories of meaning, which we will introduce and describe in turn.

Category 1 Skills and strategies applied in orientation and mobility

Research participants use many skills and strategies to help them navigate and be mobile. The skills and strategies used differ from one participant to another. Firstly, due to different degrees of sight loss and also due to individual differences in terms of character traits, attitudes or the extent to which participants use the skills they have acquired. The way in which *orientation and mobility skills and strategies were acquired also differed.*

The course on spatial orientation and independent movement was of great importance, according to the participants who took it. It has given them orientation and mobility skills that they can apply in everyday situations. Among the skills mentioned by the participants, these included walking with a white cane, techniques used when walking with a sighted guide or how to ask passers-by for help. The course had a significant benefit for the participants in terms of their psychological well-being and also serves as a form of prevention of their social isolation. P2: *Well, if they hadn't taught us these skills, I would have just sat at home. So I think that says it all. I wouldn't go anywhere on my own, I'd just be at home.*

A variety of *compensatory aids* have an indispensable place in the orientation and mobility of visually impaired individuals. The long white cane is owned by all participants, but not all of them use it. A magnifying glass (for shopping), a turmon (to read street names) and a phone with GPS navigation also help participants in orientation and mobility.

In practice, participants apply several skills and strategies they have acquired through the course, but also those they have naturally arrived at, e.g. walking with a sighted guide (P5 “*...when I hold on to him and we go up the stairs, he raises his hand to say we're coming*”); using memory to orient themselves according to landmarks (P5 “*I remember a pillar or a house and then I follow it. The second time I go or back, I remember it*”); plan-

ning the route in advance; addressing passers-by and asking for help (P5 “...I also address strangers in the street in this way”). In orientation and mobility, participants engage different senses as well as the remnants of functional vision. Hearing is considered important in orientation by all participants and is used in different situations. Tactile perception is used by the participants when walking with a white cane, when recognizing obstacles, when identifying guide lines, and touch also helps them to ensure their own safety. P6 “...that stick is good on the bus, you can feel the seat and the steps up and down”. Two participants also use their sense of smell as part of orientation and mobility.

Category 2 Positive external determinants of orientation and mobility

In the course of the interviews, participants mentioned a number of factors (of positive nature) that facilitate their orientation and mobility and through which they can achieve varying degrees of independence and freedom. The *help of those around them*, be they family members or random passers-by, plays a very significant role in orientation and mobility. As individuals cannot perceive many aspects of the external environment to the same extent as a visually impaired person, as a result of a visual impairment, they naturally cannot be independent in all ‘orientation’ situations. Some orientation problems can be overcome through compensatory aids, but the assistance of another person nevertheless often remains the quickest and most natural choice. All participants reported that they use some form of help from others in the area of orientation and mobility, only the degree (frequency, intensity) to which they need this help varies.

Another important source of help in situations related to orientation and mobility are *family members, friends, acquaintances or personal assistants*. Their help is used by all participants. Assistance from *social rehabilitation professionals* also plays an important role.

One of the areas we identified in our analysis was what we have termed *physical environmental factors*. In addition to the landmarks and signs that have individual meaning on the different routes used by participants, these are mainly various *barrier removing elements* such as sounded traffic lights, announcements of stops on public transport vehicles, guide lines, contrasting signage at the beginning and end of stairs, and lighting at the entrance to escalators. All participants agreed on the importance of these elements to facilitate orientation and mobility and to add confidence when travelling and moving from place to place. The

level of familiarity with the environment was also identified as a strong positive determinant. If participants are familiar with the environment, they can move more freely within it and do not need to be accompanied by another person.

Category 3 Negative external determinants of orientation and mobility

In our research, we have also identified a number of obstacles and problems (determinants of a negative nature) that individuals with visual impairments have to overcome in the process of orientation and mobility and that make it difficult for them to move freely and safely. These are mainly a) *barriers and problems stemming from the surrounding environment* (flyers, billboards and signs on pavements, glass doors, absent or incorrectly designed barrier removing elements, lack of contrasting stair markings, lack of sound signaling at pedestrian crossings, lack of announcements of stops in public transport, poles crossing guide lines or insufficiently distinctive guide lines, information barriers); b) *orientation and mobility risks* (weather, darkness, environmental distractions such as conversations or traffic from the street, reduced availability of compensatory aids or barrier removing measures; c) *people's approach* (assault, threat, unpleasant reactions from the surroundings, reluctance). P2: *"I have a white stick, but I confess I don't use it very much because it is information for the homeless. When one saw it, he immediately ripped off my purse"*.

Category 4 Internal determinants of orientation and mobility

A very important category that emerged from our research is the internal determinants of orientation and mobility processes. In particular, these are factors based on individuals themselves, which are related to their health, attitudes, mental state and individual character traits, and their influence on the field of orientation and mobility is truly fundamental. We have identified two groups of internal determinants - positive and negative.

Positive internal determinants include, in particular, the desire for activity, the need for activity, health benefits, the will not to give up, to overcome obstacles (*"One must not give up, because if you give up, that is the worst thing that can happen (P1)"*). *"If I have to go somewhere, one can't help it, one has to cope with it somehow, even if it's harder (P4)"*. Other important factors of orientation and mobility are also *courage and the desire to be as independent as possible*.

On the contrary, as negative factors we identified e.g. fear, loss of courage, resignation, feeling of shame, or reluctance to present their visual impairment in front of other people, perception of themselves as a burden to the environment (P5 *“There is a lot of assistance around me. So sometimes I tell myself that I don’t even want to bother those people anymore and I’d rather walk at home”*).

Interpretation and research conclusions

The results we obtained through empirical work name several problems that are only sporadically and fragmentarily reported in the literature. The problems relate more specifically to the process of training the necessary competences for orientation and mobility and to the process of orientation and mobility itself (transfer of competences and their application) and to the perception of one’s own competences in orientation and mobility.

The first objective of our research was to identify factors/determinants that influence orientation and mobility of seniors with visual impairment. Based on the analysis of the interviews conducted and through sequential multilayer coding *in vivo*, we identified a large number of determinants that affect the orientation and mobility of seniors with visual impairment. We found that we can speak both of external determinants, which stem from the external environment surrounding a given individual with a visual impairment, but also of internal determinants, which stem from the person themselves. For both external and internal determinants, on the one hand, there are positive determinants that in some way facilitate the individual’s orientation and mobility, expanding their possibilities in this area and thus contributing to the improvement of orientation and mobility activities, but on the other hand, there are also negative determinants that make orientation and mobility more difficult for seniors with visual impairments in various ways. In the following diagram we present a more concrete structure of these.

Naturally, not all of the determinants we have identified above must necessarily affect every participant. The interplay of the various positive and negative determinants, together with their specific perceptions of a particular individual, affects the orientation and mobility field of each participant in a unique way.

The second aim of our research was to *find out how seniors with visual impairment perceive/evaluate their acquired competences in the area of orientation and mobility and to describe their self-perception of their capabilities*

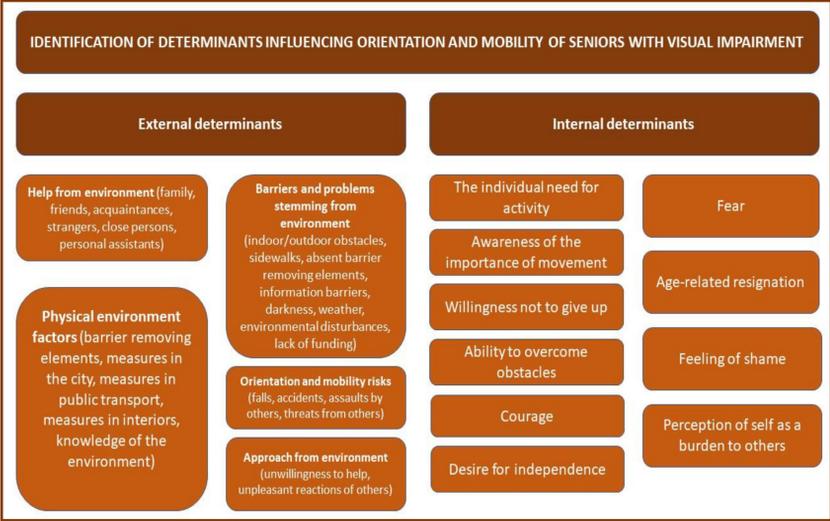


Diagram 1 Identification of determinants influencing the orientation and mobility of seniors with disabilities

in this area. The competencies that seniors exercise in orientation and mobility were acquired through some form of training in spatial orientation and independent movement, but also through their own abilities and experiences in their everyday lives. Seniors evaluated their competences differently. However, they varied in their level of satisfaction, ranging from overall satisfaction, to a sufficient level for their independence in orientation and mobility, to a satisfactory level for independent movement in the home environment, in the immediate surroundings of the house and on selected familiar routes. All of the seniors who were part of our research have close persons in their environment on whose help they can rely in situations related to orientation and mobility. Through this assistance, they are able to carry out a wider range of different activities.

The third research objective was to *determine the importance of independence in orientation and mobility for seniors with visual impairment.* The interviews revealed that independence and the ability to move independently mean a great deal to seniors. They are able to do independent shopping, cleaning, travelling on public transportation, attending cultural events, meeting friends or visiting the doctor. However, it

should be noted that the level of independence varies considerably between participants and most of the seniors who participated in the research are not satisfied with their level of independence and wish they could manage more activities independently. However, they all agreed that the activities they can do independently bring them joy, satisfaction and a feeling of being useful and not being dependent on others for everything.

In our research, we were also interested in how, *from the perspective of seniors with pre-senior-onset visual impairments, does aging affect the use of orientation and mobility skills?* Overall, the seniors who participated in our research did not experience a significant impact of aging on their use of orientation and mobility skills, although some specifics emerged due to the effects of age. Some seniors reported health problems resulting from their age, such as leg or spinal pain, high blood pressure, and cardiac arrhythmia. However, these do not affect their orientation and mobility skills, and although they sometimes feel more fatigue as a result of these difficulties, or choose not to do an activity because of pain, in general they do not feel that their health problems have a significant impact on orientation and mobility. As some elderly people also use their residual vision (preserved light and color sensitivity) for orientation, the gradual deterioration of their vision, which also occurs with ageing, naturally affects their orientation and mobility. For them, the deterioration of vision means that other senses need to be more involved in the orientation and mobility process, but it also makes some elderly people more fearful in situations involving orientation and mobility, leading them to be more cautious or to need to have a sighted guide with them. Apart from the deterioration of vision, seniors do not experience any other decline in the quality of their other senses.

In a specific way, seniors perceive and place great importance on their *own orientation and mobility skills for their independence*. These skills enable them to participate in normal daily life. Nevertheless, we identified some differences in the analysis. One of the factors involved in the different perceptions of the importance of the skills is the age at which the sight loss occurred. Those participants whose sight loss occurred before they reached productive age acquired the most skills and thus these skills contribute most significantly to their independence. For other seniors, their own skills are also important, but they rely more on the help of other people, which in some cases they prefer to using their own skills and acquiring new ones. Another factor was the availability of this

help from other people. In addition to skills directly related to orientation and mobility, seniors consider their own communication and social skills to be important for their independence, as they are able to ask passers-by for help.

To summarize and conclude the most important results of our research, we must note that the interviews conducted allowed us to analyze the area of orientation and mobility in greater detail from the point of view of the seniors with visual impairment themselves and the competencies important for this area, as well as other important determinants affecting this area. We learned about the problems that exist in this area, but also about the factors that are perceived positively by seniors and that facilitate orientation and mobility. We also consider the seniors' statements concerning their self-perception of the possibilities in the area of orientation and mobility and socio-emotional experience to be important.

Each life stage brings with it specificities in the area of orientation and mobility that may influence the training and use of skills in this area, but also the importance individuals attach to skills. According to Crews and Clark (1997), younger people tend to want to achieve as much independence in orientation and mobility as possible, but in contrast, seniors may more often prefer to be accompanied by another person, regardless of the degree of vision loss. They also report that seniors have a more limited range of places to which they want to go - usually grocery stores, pharmacies, places offering leisure activities, the homes of friends and family, or close to home for health walks. They are much less used to going to places that are unfamiliar to them. The results of our research are consistent with the claims of Crews and Clark (1997). Most participants are most likely to move within a steady circle of a few places familiar to them. In these places, many seniors are able to move independently. Often this involves, for example, a visit to a shop near their home or a learned journey to the nearest public transport stop. However, when travelling to less familiar places, participants prefer the services of a guide.

In the course of our research, we repeatedly came to the question of dependence or independence of seniors. Dependence is a problem often associated with old age. Seniors are losing strength, they are no longer able to perform all activities on their own and there is also the fear of potential failure. This can lead to the gradual emergence of dependence on help from others. We believe that this understanding of au-

tonomy describes the situation of seniors with visual impairment very well. Since visual impairment entails dependence on others in at least some situations, it is important to recognize that despite this, these individuals can retain their autonomy. We can say that the seniors who participated in our research maintain this autonomy to some extent. They do use the help of others, but even when receiving this help, or thanks to it, they maintain control over their lives and daily activities.

In the context of the impact of ageing on orientation and mobility, mention should also be made of those seniors whose vision loss occurred in old age or just before the onset of old age. Our research involved two participants who lost their sight at this age. As Majewski (2001) states, the situation they found themselves in is different from that of those seniors who had been living with vision loss for a prolonged period of time prior to entering old age, and brings them the double burden of coping with aging and vision loss simultaneously. The impact of this specific situation was most evident with P6, who, despite acquiring some orientation and mobility skills, has not achieved independence, and outside his home relies almost exclusively on the help of his wife, family, friends or a personal assistant in situations related to orientation and mobility. The other participant who lost his sight at an older age was P3, who is more independent compared to P6 in the area of orientation and mobility. It should be noted that this difference, along with other possible factors of course, is likely to be largely related to the different degrees of vision loss of the two participants. Whereas P3 was practically blind, P6 was completely blind, so this participant can use almost no residual vision to assist him in orientation and mobility, and thus perhaps add the necessary confidence to achieve some independence in mobility.

We conclude with some propositions that could improve the processes of training and implementation of orientation and mobility for seniors with visual impairment:

- Providing adequate psychological support to seniors would help them overcome their internal inhibitions and motivate them to acquire orientation and mobility skills.
- Information campaigns can be useful means of systematically raising public awareness about appropriate access to visually impaired seniors and the correct provision of assistance in situations related to orientation and mobility.
- Quality combined with quantity of information on the possibilities of using and controlling modern aids for orientation and mobility

would contribute significantly to the independence of seniors with visual impairment.

- Sensitivity and tolerance to the needs of people with disabilities can significantly influence the removal of barriers and the application of barrier removing in their environment.
- Systematically strengthening the orientation and mobility skills of seniors can increase their confidence in independent movement as well as their independence.

Conclusion

There is no doubt that any visual impairment, together with its consequences, significantly affects a person's functioning in many spheres of life. One of the areas specifically affected is orientation and mobility. If a person loses the ability to see, or if their visual perception is so limited that it restricts their freedom, autonomy or independence, it is appropriate for them to have a range of options available to them to develop their skills.

Our research confirms that the existence of architectural barriers and other obstacles in the physical environment poses a major problem, especially for seniors with visual impairments who are or want to be still active and want to be able to get to different places in the near and distant surroundings safely. One of the ways to overcome this barrier is to acquire skills and relevant competences in orientation and mobility, but also to seek help from the environment and access support from close family members, friends and acquaintances. People's help also plays an important role in making and maintaining social contacts.

Seniors who participated in our research differed in their attitudes, in their assessment of their own skills and in their overall satisfaction with their orientation and mobility options. What was common to all, however, was a strong need for independence. The efforts of competent persons should therefore be directed towards creating the conditions for seniors with visual impairment to achieve the highest possible degree of independence in orientation and mobility, while respecting their own perceptions.

We believe that our research has added to the current state of scientific knowledge and the results of the research, as well as a more comprehensive treatment of the subject, will advance the understanding of the views, experiences and needs of seniors in the field of orientation and mobility and will thus contribute to its improvement.

References

1. Ayres AJ. Sensory Integration and the Child: 25th Anniversary. Western Psychological Services; 2005. 211 p. ISBN: 978-087-4244-37-3. Available from: <https://books.google.la/books?id=-7NeFNFswo0C&printsec=frontcover#v=onepage&q&f=false>
2. Ballemans J, Kempen G, Zijlstra G. A. Orientation and mobility training for partially-sighted older adults using an identification cane: a systematic review. *Clinical Rehabilitation*. 2011; 25(10):880-891.
3. Ballemans J, Zijlstra GA, Van Rens G, Schouten J, Kempen G. Usefulness and acceptability of a standardised orientation and mobility training for partially-sighted older adults using an identification cane. *BioMed Health Services Research*. 2012;12 [online]. Available on: <http://www.biomedcentral.com/1472-6963/12/141>
4. Cimarolli VR, Boerner K, Brennan-Ing M, Reinhardt JP, Horowitz A.. Challenges faced by older adults with vision loss: a qualitative study with implications for rehabilitation. *Clinical rehabilitation*. 2012;26(8):748-757.
5. Crews J E, Clark HC. Orientation and Mobility for the Older Person. In: Wiener WR, Welsh RL, Blasch BB. *Foundations of Orientation and Mobility*. New York: AFB Press; 1997. 775 p. ISBN 9780891289463
6. Dahlin-Ivanoff S, Sonn U. Use of assistive devices in daily activities among 85-year-olds living at home focusing especially on the visually impaired. *Disability and Rehabilitation*. 2004; 26(24):1423-1430.
7. Engel RJ, Welsh RL, Lewis LJ. Improving the Well-Being of Vision-Impaired Older Adults Through Orientation and Mobility Training and Rehabilitation: An Evaluation. *RE:view*. 2000;32(2):67-76.
8. Gáborová L, Gáborová Z. *Človek v sociálnom kontexte*. Prešov: LANA; 2007. 174 p. ISBN 80-969053-8-4
9. Griffin-Shirley N, Welsh RL. Teaching Orientation and Mobility to Older Adults. In: Wiener WR, Welsh RL, Blasch BB. *Foundations of Orientation and Mobility*, 3rd Edition: Volume 2, Instructional Strategies and Practical Applications. New York: American Foundation for the Blind; 2010. 854 p. ISBN 978-08-912-8461-1
10. Hewstone M, Stroebe W. *Sociální psychologie*. Praha: Praha; 2006. 776 p. ISBN 80-7367-092-5
11. Kostrub D. *Základy kvalitatívnej metodológie: Keď interpretované významy znamenajú viac ako vysoké čísla*. Bratislava: Vydavateľstvo UK; 2016. 162 p. ISBN 978-80-223-4166-0
12. Kuyk T, Elliott JL, Wesley J, Scilley K, Mcintosh E, Mitchell S, Owsley C. Mobility function in older veterans improves after blind rehabilitation. *Journal of Rehabilitation Research & Development*. 2004; 41(3):337-346.
13. La Grow S. The Effectiveness of Comprehensive Low Vision Services for Older Persons with Visual Impairments in New Zealand. *Journal of Visual Impairment and Blindness*. 2004; 98(11):679-692.

14. Lamoureux E, Pallant J, Pesudovs K, Rees G, Hassell J, Keeffe J. The Effectiveness of Low-Vision Rehabilitation on Participation in Daily Living and Quality of Life. *Investigative Ophthalmology & Visual Science*. 2007; 48(4):1476-1482.
15. Lopúchová J. Reeducácia a komplexná rehabilitácia zraku u jednotlivcov so zrakovým postihnutím. 1 vyd. Bratislava: Iris; 2010. 210 p. ISBN 978-80-89238-40-8
16. Lopúchová J. Základy pedagogiky zrakovo postihnutých. Bratislava: Iris; 2011. 245 p. ISBN 978-80-89238-61-3
17. Majewski T. Problems and Rehabilitation of Blind and Visually Impaired Seniors in Poland. In: Wahl HW, Schulze HE. *On the Special Needs of Blind and Low Vision Seniors: Research and Practice Concepts*. IOS Press; 2001. 351 p. ISBN 9781586031527
18. Pichaud C, Thareauová I. Soužití se staršími lidmi. Praha: Portál; 1998. 160 s. ISBN 80-7178-184-3
19. Sibgatullina-Denis I, Vančová A, März-Teriaeva L. Metod parkovogo ritrita v kombinirovannyh programmah psichologičeskogo soprovoždenia. Metod parkovogo ritrita (MPR: PARKRITRITUS, Sibgatullina-Denis, März, 2005) v kombinirovannyh programmah psichologičeskogo soprovoždenia. Raznoobrazie i benčmarking inkluzii: 1. vyd. ISBN 978-5-907411-66-1. Čebok-sary: Publishing house "Sreda"; 2021. p.167-179.
20. Sibgatullina-Denis I, Riabov OR, Merzon E, Vančová A. Descriptive analysis of benchmarking in respect to SMART/UNI-Q systems intellectual integrations within the European higher education area = Deskriptivnyj analiz benčmarkinga intellektualnych integracij SMART/UNI-Q sistem v ramkach Evropejskogo prostranstva vysšego obrazovanija. *Integration of Education*. 2020;24(4):532-551. ISSN (print) 1991-9468
21. Stuart-Hamilton I. Psychologie stárnutí. Praha: Portál; 1999. 320 p. ISBN 80-7178-274-2
22. Vágnerová M. Vývojová psychologie II. Dospělost a stáří. Praha: Univerzita Karlova v Praze; 2007. 461 p. ISBN 978-80-246-1318-5
23. Vančová A. Pedagogika viacnásobne postihnutých. Bratislava: KKT o.z; 2010. ISBN 978-80-970228-1-5
24. Wolf J, Freiová E, Srnc J, Musil J, Livečka E, Řehák M. Umění žít a stárnout. 1982.
25. Zijlstra GA, Ballemans J, Kempen G. Orientation and mobility training for adults with low vision: a new standardized approach. *Clinical Rehabilitation*. 2012; 27(1):3-18.
26. Zijlstra GA, Van Rens GH, Scherder EJ, Brouwer DM, Van Der Velde J, Verstraten PF, et al. Effects and feasibility of a standardised orientation and mobility training in using an identification cane for older adults with low vision: design of a randomised controlled trial. *IBioMed Health Services Research*. 2009; 9. [online]. [cit. 2019-1-30]. Available from: <http://www.biomedcentral.com/1472-6963/9/153>



DEVELOPMENT OF SPECIFIC SKILLS IN CHILDREN WITH AUTISM SPECTRUM DISORDERS IN THE EDUCATIONAL PROCESS

Lenka Nadányi

Abstract. The prospects of many individuals with autism spectrum disorder (ASD) are clearer today than in the past. Many more people with ASD will learn to speak, communicate, read and will largely get rid of some of the symptoms resulting from their disorder. This can be influenced by proper education and upbringing not only in the family, but especially in educational institutions. The paper outlines some methods and strategies that teachers can implement in the educational process of children and students with ASD to develop their specific skills and increase their chances of adequate participation in society, as well as improving their quality of life.

Keywords: autism spectrum disorders, communication, social skills, play, education.

Development of specific skills in children with autism spectrum disorders

ASD are neurodevelopmental disorders that are manifested by deficits in three main areas – social skills, communication, and repetitive patterns of behavior, interests, and play [1; 2]. Without effective intervention, these restrictions can hinder the child's meaningful participation in education and general socialization [3]. Children's limited communication and social skills contribute to their isolation, poor social interactions with peers, and therefore require support in the area of social participation [4]. Interventions should be individualized for a specific child, as each child with ASD has specific problems and needs. Teachers and other professionals (e.g. speech therapists, therapists) working with children and pupils with ASD should be able to master different methods and be able to implement strategies that address complex strengths and weaknesses as well as the needs of this group of children [5]. Cooperation with the child's parents is essential when choosing individual goals. Parents know their child best and are likely to have best practices and procedures that can potentially work in other settings [6; 30; 31]. It is essential to obtain information from the family on the child's daily routines, strengths, and needs [5].

It is appropriate to use various methods and strategies in the educational process. It is important that teachers are informed about them and know how to implement them. In the first place, they can use spe-

cial pedagogical methods. The most widely suitable and most used special pedagogical methods, which must be adapted to the developmental level of the child, were formulated by the Czech authors Čadilová and Žamapachová in a publication from 2012 [6]. These are specifically methods:

- Appropriateness – it is necessary to respect the strengths and weaknesses of the child with ASD and take this into account when choosing a suitable method in education.
- Step-by-step tasks – more complex tasks should be divided into small steps to ensure that the child is progressing and working properly and will ultimately complete the task.
- Consolidation – it is important to pay attention to fixing the acquired knowledge and skills by repeating and practicing them.
- Signs and guidance – the teacher actively helps the child by providing clues and guidance to complete the task successfully.
- Rule-making – it is useful in situations where children have to follow certain regular and recurring procedures.
- Demonstrations – the teacher creates situations that are imitated or demonstrated.
- Encouragement – represents the reinforcement of the child's positive reactions and activities.
- Ignore method – the method should be used in the problematic behavior of a child who is trying to attract the attention of the teacher. However, it is important to keep the child under control to avoid injury.

As already mentioned, for education and interventions to be effective, special evidence-based methods need to be used. The use of behavioral interventions has been shown to be effective in developing specific skills in children with ASD. One of the effective behavioral methods is prompts. Prompts are small forms of help designed to increase a child's chances of answering correctly [7]. A prompt is any kind of verbal help or manual guidance provided by another person to a child with ASD, which allows the child to engage in targeted responses, resp. behavior [4]. A prompting is an effective special method that is evidence-based and is a part of behavioral interventions. According to Mikurčíková L. and Trellová I. (2021), prompting is used to evoke the expected response, while ensuring rapid and smooth acquisition of new skills [8]. The prompt needs to be phased out (e.g., from a physical prompt to a verbal prompt, such as a “check schedule”) until the child has mastered

the target skill alone [5]. On the one hand, it is important to help the child and increase his or her success, but on the other hand, the child's dependence on help must be avoided [8]. The prompt must be removed so that the child can perform the learned skill without the help of another person, for example, the teacher or parent [9].

Prompts can be used in learning social skills, functional communication, game, self-service, and academic skills or alternative and desirable behavior, but also in eliminating problem behavior. The form of the prompt used is chosen depending on the situation and the role of the child. A distinction can be made between these forms of prompts [8]:

- Verbal prompt – used when a verbal answer is required from the child.
 - o Example: “What is this (pointing to a picture of a cow)?”, full prompt “Cow”, partial prompt “Co”.
 - Model prompt – used when the child is learning social, self-service skills, but also in physical activities.
 - o Example: The teacher demonstrates the movement, how the hands are washed (full prompt – full movement, partial prompt – start of movement).
 - Physical prompt – represents the child's physical guidance and is used when the child is learning self-service skills, motor imitation, etc.
 - o Example: Physical hand guidance when drawing (full prompt – full movement, partial prompt – start of crayon movement).
 - Gestural prompt – used when the child has to identify pictures, objects (e. g. points a finger at the picture).
 - o Example: Pointing a finger at an object (full prompt). Indicating to pointing to an object (partial prompt).
 - Visual prompt (related to position and size) – used when the child has to identify pictures, objects (a large picture placed closer to the child increases the likelihood that the child will answer correctly).
 - o Example: The object is directly in front of the child and away from the others (full prompt). The object is further from the child, but still not within reach of others (partial prompt).
 - Extra-stimulus prompt – used when the child has to identify pictures, objects (picture/object can be significantly different from others, e. g. a strong color or shape).
 - o Example: The child chooses a big red car from the small blue cars.
- So far, methods and strategies have been mentioned that can be ap-

plied in the development of any skill, as well as in the elimination of problem behavior in children with ASD. The next part of the paper will describe more specific methods aimed at developing social, communication, and gaming skills.

Development of social skills

Socialization is a critical aspect because it is an essential element for the successful inclusion of people with ASD at any level. The importance of social interactions with peers is a critical aspect of a child's development, but it is becoming an even more critical issue for children with ASD due to the limitations resulting from their disorder [4]. Insufficient support in the field of social skills can mean a child's failure in further socialization, but especially a negative and insufficient consequence of interventions. Attention must be focused on developing social interactions, relationships, self-regulation and responsibility skills, cooperative skills, and also school and academic skills [10]. Peer-mediated interventions are a suitable means of developing children's social skills and interactions with ASD. This is a particularly appropriate intervention in an inclusive learning environment [11]. Peers can play a number of roles in developing the skills of children with ASD, such as providing patterns of appropriate behavior, initiating interactions, and encouraging and reinforcing desirable behaviors. Positive reinforcement is characterized as a stimulus that is provided immediately after a child's behavior in order to increase the incidence of that behavior [8]. Children with ASD can also benefit from social interaction with peers. The game is the basis of many other skills, including social communication, and therefore initiating the game from peers is desirable [3]. Peer-mediated interventions have shown improved social, communication, play, and academic skills in children and pupils with ASD [12].

Inclusive educational institutions offer children with ASD the opportunity to be part of the same learning environment as their typically developing peers and to practice the social behaviors needed to interact with them [13]. Children with ASD can benefit from opportunities to observe, initiate social interactions, and respond to the social and playful situations of neurotypical peers offered by an inclusive environment. However, sufficient support, guidance, and instruction is needed for classmates without an ASD. Without systematic planning, the intervention will not be effective [3]. To support intact children and students, teachers can use, for example, instructional methods, situation modeling, feedback, role-play, prompts, visual support, reinforcement, etc. [14].

Another suitable method is Social Stories. Short stories describe situations that children with ASD do not understand. They help children to orient themselves better, and also to respond appropriately in real-life social situations. They are used to describe common situations a child may experience and to share information with children with ASD on what they can expect, how they can respond appropriately (appropriate behavior) in a particular situation [15]. Intervention through Social Stories is a noninvasive and child-friendly way of practicing functional behavior [16]. These stories are written from the child's point of view and can have a textual as well as a visual form (pictures, videos). They are always formulated to lead to a positive conclusion. Social Stories are used to learn social skills and develop communication, but they can also be used as a preventive strategy for problem behavior. Interventions that combine social skills training, functional behavior training and problem solving are proving effective [3]. Social behavior training improves adaptability and secondarily reduces problem behavior in a child with ASD [17].

Social Stories are relatively easy to create. Individualization for the specific needs of a child with ASD can be challenging. It is usually not possible to use a single story for more than one child. It is necessary to consider the child's abilities, level of understanding, vocabulary, as well as formal arrangements (e.g., font size, pictures, photographs). They can be implemented directly into the educational process. The teacher can give a story to a child with ASD and the child reads it independently. Another possibility is that the teacher reads the story or a video is made that the child can watch [18]. It is recommended that the teacher discuss the story with the child later and explain any ambiguities. Chan and O'Reilly (2008) found that appropriate behavior among preschool-age children with ASD increased significantly after the implementation of Social Stories [15]. The authors investigated the use of Social Stories in learning to brush the teeth of children with ASD, which also showed positive results, suggesting that they can be used secondarily for purposes other than understanding social situations.

Teachers can develop Social Stories on their own or they can be inspired by existing stories, but, as already mentioned, the story must be individualized for the needs of a particular child with ASD. For example, the website www.storyboardthat.com is available for creating visualized Social Stories, but it is possible to use any programs and applications, or even drawing depending on the ability of the teacher to work with information and communication technologies.

Straussová, R. and Knotková, M. (2011) state that learning social skills should be connected with emotions [6]. A child with ASD initially learns to name his own emotions in specific situations (e.g., I am angry, scared, etc.). The role of the teacher is to accurately explain and justify what the child should do and, conversely, what is inappropriate to do. An important element in understanding social behavior is visualization, which is used in various ways, for example, in the Social Stories explained above and in drawing. The authors state that situations are drawn from the moment the child is in the situation (sadness, anger, or other emotions of the child in various situations), and gradually the actors who participate in the situation are added. Emotions initially differ only on two basic levels, namely in the positive and in the negative [6].

Development of communication skills

Communication is one of the main problematic and deficit areas for children with ASD. It is important that children build and develop functional communication, and there are various methods for this. In some children with AS (e. g. Asperger's syndrome), speech as such, vocabulary and sentence structure may be at a very good level. However, problems arise in understanding and using communication in a social context [6]. A child with ASD fails as a communication partner, and thus the problems manifest themselves especially in the pragmatic level of speech. Disruption of prosodic speech factors, monotony, or volume problems also appear [19]. By increasing communication skills and competences, children with ASD can participate in peer interactions, make friends, expand play and academic skills, and reduce problem behavior [20].

Some children can learn spoken language, while other children need to choose some form of alternative or augmentative communication (AAC). AAC can be identified as communication therapy [21]. AAC is a method that helps the individual to compensate for communication problems and at the same time helps to communicate more effectively. Individuals with ASD can choose from AAC methods without aids, but also with aids. For example, you can choose from the following options: PCS (Picture Communication Symbols), which are black and white or color pictograms/symbols, PECS (The Picture Exchange Communication System), which is a system used mainly abroad, VOKS (known as Výmenný obrázkový komunikačný systém used in Slovakia) communication system represents a modified PECS, the goal of both systems is functional communication (children learn how to communicate and understand that they can achieve something through communication,

they also learn to understand the environment), Vidgit represents symbols used in SymWriter or Grid 2 [22]. AAC methods without aids is, for example, a sign language or other form of signing. Gestures often need to be adjusted according to the motor abilities of the child with ASD.

When learning communication, it is important to teach the child to communicate and respond, it does not matter whether the child teachers will teach spoken language, signs or the use of VOKS. However, at the beginning of learning, it is necessary to identify the appropriate modality of communication. When choosing it, the child's ability to imitate motor (necessary for communication with signs), vocal imitation (echoically) of the heard word (necessary for speech) and also assign 2D to 3D, means image to the object (necessary for communication via VOKS), on the basis of which it is possible to determine a suitable way of communication of the child with ASD. In some cases, the child uses spoken language at the same time as signs (e.g., in the case of difficult words or, conversely, in the case of a child's insufficient motor skills), and thus we can also talk about the development of bilingualism in a child with ASD. Parents usually prefer spoken language, but if the child is non-verbal and they choose AAC, a certain form of signing is a more preferred choice. While the child does not need any aids for signing (e.g., signs), he or she needs them for selection-based communication (e.g., VOKS – e.g., pictures, tablets, etc.). The need for devices can be a disadvantage, as they must have it with them at all times to communicate [20]. Furthermore, it is necessary to determine the way communication will develop and individualize it to the needs of a particular child. Functional communication training is the most common empirically supported intervention for individuals with ASD [23].

After determining the appropriate modality of communication, it is possible to move on to the actual learning and practice of functional communication. The aim of communication training is to reduce problem behavior while creating appropriate responses in communication situations for the child [24]. Communication training weakens problem behavior by extinction, while at the same time increasing the child's communication repertoire [25]. Teachers' prompts are a suitable means of practicing communication. If communication training is accompanied by anger, crying, aggression, or other undesirable behavior, the use of the prompt will be reactive. The response chain in the reactive strategy is shown in the following figure.



Figure 1 Reactive strategy in communication training
 Source: Prepared according to Landa, R. K. et al. (2022).

The strategy described in Figure 1 is not a popular choice, as it is a reactive strategy, which means that the problem behavior has occurred and only then has the professional provided the necessary help to the child in the form of a prompt. Reinforcement is provided to the child for the correct answer, in this case for the appropriate response in communication after the undesirable behavior is eliminated. Proactive use of the prompt is a more preferred option [24]. If the professional knows that the child will be experiencing problem behavior because he or she cannot communicate his or her requests adequately and appropriately, it is appropriate to use the prompt before the child will have to respond in a communication situation. In such a case, there is a high probability that the problem behavior will not occur at all, resp. it can occur, but the cause of the behavior will not be that the child could not communicate their needs properly, but the cause will be different (e. g. the child's inability to accept the request from an adult, etc.). The response string for a proactive strategy is shown in the following image.



Figure 2 Proactive strategy in communication training
 Source: Own processing.

Figure 2 shows a proactive strategy that uses a prompt to practice functional communication. Reinforcement is provided to the child for the correct answer, in this case for the appropriate response in communication. The strategy helps eliminate the occurrence of problem behavior in a child with ASD in communication situations. However, it is essential to pay attention to the gradual removal of adults' prompts. Otherwise, dependence on prompts (they do nothing on their own without help) may occur in the child, resp. pupils, which is important to avoid [24]. Research conducted by Landa, R. K. et al. (2022) shows

that problem behaviors during communication situations were gradually eliminated in children when using immediate or delayed prompts proactively, while persisting in reactive prompt strategies. Functional communication training can take place during various situations, which should be planned and created in advance. If a child learns to communicate with only one person in one environment, it is very likely that they will acquire a skill that they will not be able to apply in another environment with other people which means that the skill will not be generalized to them [20]. The heterogeneity of situations, as well as the different environments or communication partners of the child, will benefit from the practice of functional communication and the child will learn to generalize communication skills [23].

Development of game skills

The game is an integral part of human development. The child's involvement in the game means a very substantial part of his or her development in the intellectual, social, psychological, and emotional areas. This is the reason why atypical or delayed game development may have an impact on the behavior, life, and socialization of an individual with ASD [26]. Children with ASD often prefer repetitive play and lack symbolic play skills, which may be associated with a limited interest in social interactions. The symbolic game takes various forms. It is about exchanging objects, attributing fake properties, and playing with imaginary objects. Attributing fake characteristics is a type of symbolic game in which a child fakes the characteristics of an object (e.g., smells a toy flower and pretends it smells like a rose) [27]. Delayed symbolic play, functional use of toys, and spontaneous independent play may hinder the development of parallel and cooperative play [3]. The ability to demonstrate a symbolic game predicts language and social development in later childhood, which is an important developmental milestone. The symbolic game has special social significance for children. It is a means by which it is possible to initiate social relationships, develop appropriate responses in social situations, and thus participate in the interactions of other children. Children with ASD often require specific instructions to demonstrate symbolic play with other children [27].

By improving the frequency and quality of the game, it is possible to reduce stereotypical behavior and increase the necessary skills [26]. As already mentioned, the presence of typically developing peers in an inclusive educational environment can be useful in tracking and modeling age-appropriate play [13]. Kasari et al. (2006), Barton (2015), and

Qui et al. (2019) conducted research that showed that through natural learning and systematic prompts, children with ASD can learn symbolic play in different settings, with different people, as well as different toys [27]. It is appropriate to create different opportunities for various symbolic games with the child, in which the child is provided with help in the form of a prompt, thanks to which he or she develops the skills needed for the game. Reinforcement methods are also used to increase adequate gaming skills [26].

Related to the development of play skills is also the ability to meaningfully organize leisure time, which children with ASD must learn in a targeted way, as they do not acquire this ability spontaneously and naturally [28]. It is possible to choose various social activities (chanting, chasing, board games, etc.), creative activities (drawing, art, etc.), practical activities (housework, gardening, handicrafts, etc.), physical activities (cycling, dancing, swimming, and playing in the pool, etc.), peaceful activities (reading books and magazines, listening to music, etc.), activities that provide sensory experiences (playing with colors, structures, sand, water, singing, etc.) or other interesting activities [29].

Conclusion

The paper presents several possible intervention strategies and methods that can be implemented in the educational process of children and students with ASD. Evidence-based strategies and behavioral interventions, or interventions that take over certain elements of them, are proving effective. It is very likely that teachers use many of the described methods on a daily basis (e.g., prompts, step-by-step method, functional communication training, etc.). Since the article deals with increasing the skills of children and pupils with specific educational needs, it is appropriate to use special pedagogical methods in the educational process. Inclusive conditions show the effective direct involvement of intact peers, who can naturally but also deliberately model adequate behavior, social, communication, gaming, and many other skills. Social stories are also applied in the development of social skills. The first step in developing communication in a child with ASD is to determine the appropriate modality. AAC is also used for children and students with ASD. Subsequently, it is possible to start training in functional communication, where the method of prompts and reinforcement can be used again. There are indeed many opportunities to develop the necessary skills in children with ASD, but teachers need to choose appropriate methods and possibly individualize them for the needs of a particular child and pupil with ASD.

References

1. Wong C, Kasari C. Play and Joint Attention of Children with Autism in the Preschool Special Education Classroom. *Journal of Autism and Developmental Disorders* [Internet]. 2012 Feb;42(10):2152–61. Available from: <https://doi.org/10.1007%2Fs10803-012-1467-2>
2. Hnilicová S, Ostatníková D. Poruchy autistického spektra-včasná diagnostika a skrining. *Pediatrica pre prax* [Internet]. 2018 [cited 2022 Mar 19];19(2):52–6. Available from: www.solen.sk
3. Hansen SG, Blakely AW, Dolata JK, Raulston T, Machalicek W. Children with Autism in the Inclusive Preschool Classroom: A Systematic Review of Single-Subject Design Interventions on Social Communication Skills. *Review Journal of Autism and Developmental Disorders* [Internet]. 2014 May;1(3):192–206. Available from: <https://doi.org/10.1007%2Fs40489-014-0020-y>
4. Gena A. The effects of prompting and social reinforcement on establishing social interactions with peers during the inclusion of four children with autism in preschool. *International Journal of Psychology* [Internet]. 2006 Dec;41(6):541–54. Available from: <https://doi.org/10.1080%2F00207590500492658>
5. Barton EE, Lawrence K, Deurloo F. Individualizing Interventions for Young Children with Autism in Preschool. *Journal of Autism and Developmental Disorders* [Internet]. 2011 Feb;42(6):1205–17. Available from: <https://doi.org/10.1007%2Fs10803-011-1195-z>
6. Adamus P, Vančová A, Löfflerová M. Poruchy autistického spektra v kontextu aktuálních interdisciplinárních poznatků. Ostrava: Pedagogická fakulta Ostravské univerzity; 2017. 168 p.
7. Barbera ML, Rasmussen T, Vadurová H, Vaďura V. Rozvoj verbálního chování : jak učit děti s autismem a jinými neurovývojovými poruchami. 1st ed. 2018.
8. Mikurčíková L, Trellová I. Metóda promptovania v edukácii žiakov so špeciálnymi výchovno-vzdelávacími potrebami. *Špeciálna pedagogika a reflexia inkluzívnych vzdelávacích trendov*. 2021;139–48.
9. Hilsen L. A step-by-step ABA curriculum for young learners with autism spectrum disorders (age 3-10). Jessica Kingsley Publishers; 2013. 384 p.
10. Simpson RL, Ganz JB, Mason R. Social skills interventions and programing for learners with autism spectrum disorders. In: Zager D, Wehmeyer ML, Simpson RL, editors. *Educating students with autism spectrum disorders*. New York: Routledge; 2012. p. 207–26.
11. Watkins L, O'Reilly M, Kuhn M, Gevarter C, Lancioni GE, Sigafos J, et al. A Review of Peer-Mediated Social Interaction Interventions for Students with Autism in Inclusive Settings. *Journal of Autism and Developmental Disorders* [Internet]. 2014 Oct;45(4):1070–83. Available from: <https://doi.org/10.1007%2Fs10803-014-2264-x>

12. Gunning C, Breathnach Ó, Holloway J, McTiernan A, Malone B. A Systematic Review of Peer-Mediated Interventions for Preschool Children with Autism Spectrum Disorder in Inclusive Settings. *Review Journal of Autism and Developmental Disorders* [Internet]. 2018 Nov;6(1):40–62. Available from: <https://doi.org/10.1007%2Fs40489-018-0153-5>
13. Tupou J, van der Meer L, Waddington H, Sigafos J. Preschool Interventions for Children with Autism Spectrum Disorder: a Review of Effectiveness Studies. *Review Journal of Autism and Developmental Disorders* [Internet]. 2019 May;6(4):381–402. Available from: <https://doi.org/10.1007%2Fs40489-019-00170-1>
14. Lee SH, Lee LW. Promoting Snack Time Interactions of Children With Autism in a Malaysian Preschool. *Topics in Early Childhood Special Education* [Internet]. 2015 Mar;35(2):89–101. Available from: <https://doi.org/10.1177%2F0271121415575272>
15. Zhou N, Wong HM, McGrath C. Efficacy of Social Story Intervention in Training Toothbrushing Skills Among Special-Care Children With and Without Autism. *Autism Research* [Internet]. 2019 Dec;13(4):666–74. Available from: <https://doi.org/10.1002%2Faur.2256>
16. Zhou N, Wong HM, McGrath C. Social story-based oral health promotion for preschool children with special healthcare needs: A 24-month randomized controlled trial. *Community Dentistry and Oral Epidemiology* [Internet]. 2020 Jun;48(5):415–22. Available from: <https://doi.org/10.1111%2Fcdoe.12554>
17. Žampachová Z, Čadilová V, Baslerová P, Kulíšek R, Michalík J, Ryšánková M. Katalog podpůrných opatření pro žáky s potřebou podpory ve vzdělávání z důvodu poruchy autistického spektra nebo vybraných psychických onemocnění. Dudová I, Polenský M, Thorová K, editors. Olomouc: Univerzita Palackého v Olomouci; 2015. 234 p.
18. Hudák J, Mikurčíková L. Sociálne príbehy v edukácii osôb s poruchami autistického spektra. Špeciálnopedagogické vedecké a praxeologické problémy v kontexte transformačných procesov. 2020;(1):321–33.
19. Čadilová V, Žampachová Z, Hanák P, Michalík J, Pelánová V. Metodika práce se žákem s poruchami autistického spektra. Vol. 1. Olomouc: Univerzita Palackého v Olomouci; 2012.
20. Trellová I, Hlebová B. Edukačná podpora pri komunikačnej kompetencii detí s poruchou autistického spektra. Špeciálnopedagogické vedecké a praxeologické problémy v kontexte transformačných procesov. 2020;(1):251–63.
21. Thorová K. Poruchy autistického spektra. Rozšířené a přepracované vydání. Praha: Portál; 2016. 488 p.
22. Bazalová B. Autizmus v edukační praxi. Praha: Portál; 2017. 240 p.
23. Simmons CA, Salvatore GL, Zangrillo AN. Efficiency and preference for alternative activities during schedule thinning with functional communication training. *Journal of Applied Behavior Analysis* [Internet]. 2021 Oct;55(1):101–20. Available from: <https://doi.org/10.1002%2Fjaba.886>

24. Landa RK, Hanley GP, Gover HC, Rajaraman A, Ruppel KW. Understanding the effects of prompting immediately after problem behavior occurs during functional communication training. *Journal of Applied Behavior Analysis* [Internet]. 2021 Nov;55(1):121–37. Available from: <https://doi.org/10.1002%2Fjaba.889>
25. Banerjee I, Lambert JM, Copeland BA, Paranczak JL, Bailey KM, Standish CM. Extending functional communication training to multiple language contexts in bilingual learners with challenging behavior. *Journal of Applied Behavior Analysis* [Internet]. 2021 Sep;55(1):80–100. Available from: <https://doi.org/10.1002%2Fjaba.883>
26. Gallagher S, Tully L. Využitie Lag rozvrhov posilňovania pri výučbe nových hrových zručností pri konštruktívnych hrách u detí s mentálnym postihnutím. *ŠPECIÁLNY PEDAGÓG*. 2016;5(1):34–49.
27. Lee GT, Hu X, Liu Y, Yang Z. Improving pretend play for children with autism through experiencing the stimulus properties of real objects. *Journal of Applied Behavior Analysis* [Internet]. 2021 May;54(4):1369–84. Available from: <https://doi.org/10.1002%2Fjaba.843>
28. Gillberg Ch, Peeters T. *Autizmus - zdravotní a výchovné aspekty*. Praha: Portál; 2003.
29. Belušková D, Šedibová A. *Autizmus v praxi - Dieťa a žiak s autizmom v pedagogickej praxi* [Internet]. Bratislava: Metodicko-pedagogické centrum v Bratislave; 2014 [cited 2022 Mar 22]. 43 p. Available from: https://mpc-edu.sk/sites/default/files/publikacie/beluskova_autizmus.pdf
30. Vančová, A.: Interdisciplinarita a inovácie v rehabilitačných, korekčných a terapeutických postupoch špeciálneho pedagóga so zameraním na deti raného a predškolského veku s poškodením CNS. In: *Možnosti a limity výzkumu ve speciální pedagogice*. - Olomouc : Univerzita Palackého v Olomouci, 2013. - S. 103-123. - ISBN 978-80-244-3930-3



THE IMPACT OF MUSIC ON THE LIFE QUALITY OF HEARING IMPAIRED

Margaréta Osvaldová, Miroslava Tomášková

Abstract. Scientific research highlights the importance of music and the extent of its positive impact on the personality of individuals with hearing impairment throughout their lifelong development. The possibilities of perceiving music through compensatory aids, playing musical instruments, vocal intervention and rhythmic-motor education are part of a more comprehensive mapping of music impact to the life quality of individuals with hearing impairment. Attention is also given to the extent of music therapy for the development of hearing and spoken language skills. We suggest, however, that although in some cases music could be used in special education interventions for individuals with hearing impairment during childhood, it is gradually disappearing from their lives as it has already fulfilled its supportive role in the acquisition of spoken language. In the research findings we offer an elaboration of the interviews of four participants with hearing impairment, who confirm through their experiences that music has positively influenced their life and their personal development. The participants actively listen to music, play musical instruments even after completing music therapy and music education, and they also form currently an important part of their leisure time activities.

Keywords: hearing impairment, compensatory aid, music education, music therapy, quality of life.

Introduction

In the past, experts made researches about what the brain picks up during music perception when hearing is limited or completely impaired. Many brain parts are involved in the processing of music. As Spitzer [29] states *"there is no music centre in the brain. Recent studies on music perception in the brain point to the fact that virtually the entire brain contributes to music perception"*. Current research indicates that music perception takes place as a synergy of different sensory organs. Sound waves are naturally received by the auditory organ and transmitted by the auditory nerve to the auditory cortex. The vibrations that arise from the sound source are perceived tactilely and also sent to the brain via the nerve endings. Sight performs the same function; visual information travels to the central nervous system, in which the synergy of all the above stimuli results in (musical) auditory perception [8; 9]. It is confirmed that there are distinctly acquired auditory processing strategies. Each person prefers to listen to different music (e.g., in fundamental

keys, in treble, orchestral, or acoustic). Thus, listening to music is understood as a complex performance in which not only specific hearing abilities are involved, but also cognitive functions [2].

Scientific relevance

Hearing helps a person acquire information early in life. If the child is naturally exposed to (musical) sounds after birth and perceives the suprasegmental factors of speech, the basis for the later development of phonological processes is established. Inadequate phonological input early in the child's life will later manifest itself in the impaired development of the semantic and syntactic structures of language [26; 31; 15].

Residual hearing and modern technology are important components for speech acquisition of a child with hearing impairment. The selection, assignment, and proper fitting of a hearing aid or cochlear implant are an essential part of this process [14]. It is anticipated that a predominantly auditory-verbal approach will be used in the education of these children [7; 5; 13]. Satisfactory outcomes can be achieved by children who are systematically guided towards purposeful collaboration, children who are involved in oral-auditory education programmes [14; 16]. By regularly practicing hearing through auditory musical stimulation (e.g., playing musical instruments and rhythmic movement education) as well as by vocal activities (e.g., use of vocal training, singing, choral singing), the child's cooperation is enhanced, it improves the child's ability to perceive, to differentiate musical sounds, and to develop communication skills [1; 3; 17].

Current trends in education and therapy for the development of hearing abilities and spoken language in individuals with hearing impairment are characterized by music-educational and music therapy concepts that contribute to the full development of their personality [4]. Concepts that use rhythmic-motor activities were tested in practice in the 1970s (Dalcrose method, Orff Schulwerk) [28]. Their main aim was to improve spoken language, practising residual hearing. Rhythm and movement education is a part of auditory and speech education; in addition to language and speech, it also affects the prosodic properties of speech, auditory perception, memory, emotions, social skills and imagination [12]. By developing the sense of rhythm and the coordination of fine and gross motor skills, speech motor skills are stimulated. Rhythmic-motor exercises positively influence the intelligibility of pronunciation of hearing-impaired children, because they promote the automation of fine-motor speech stereotypes and provide support

for rhythmic-motor accentuation [6; 10; 11; 33]. They are also important for inducing the emotional side of passive and active speech. Musical-rhythmic activities that achieve the goals of auditory and speech stimulation include nursery rhymes, poems, songs, rhythmic narration, as well as prosodic factors of speech [19; 20; 22; 33].

Later, concepts are emerging that no longer target speech and hearing development alone, but focus multisensory and integrative. An important music therapy concept was Clive Robbins and Paul Nordoff's Creative Music Therapy, which formed the basis for the rhythmic music education programme for children with hearing impairment in the New York State School system in the USA and for other newly developed concepts [18]. These included music and auditory education, singing, movement and dance, playing a musical instrument, and music theory [21; 23]. The authors were of the opinion that musicality is innate to humans, even in children who do not hear. In their view, the person is attuned to music and music is attuned to the person, which means that the same sensitivity to sound perception, musical predisposition and abilities are innate even in a child with hearing loss. Their goal was to reach children through musical experiences and awaken their innate musicality. One of the areas is singing, which is very important when playing with songs [30]. Nordoff Robbins thus explodes the myths that a child with hearing loss is unable to sing [21; 22]. At the same time, so-called purposeful approaches have emerged, such as Music Therapy and Speech Therapy by the Danish music therapist Claus Bang. The author stressed the importance of a variety of musical activities - group playing on musical instruments, music speech therapy, singing therapy, movement and dance therapy, group improvisation, playing in a school orchestra, playing the organ, piano, accordion, and percussion [22]. In the 1990s, Schirley Salmon's multisensory and integrative approaches were developed and other approaches were aimed at supporting and developing educators and therapists in this area by Stelzhammer-Reichhardt. Approaches in educating hearing impaired students through music are many [27; 28]. Those that focus on the pedagogy of the hearing impaired were characterised by Salmon [25], who discusses the use of music in the education of pupils with hearing impairment in Salzburg. She states that through music therapy and music education, the spoken language of children with hearing impairment is at a higher level, which has a direct impact on improving their social competence. Parents of children with hearing impairment claim that their quality of life has also improved socio-emo-

tionally [25; 32]. Salmon [25] found that children and adults with hearing impairment report the same quality of life socioemotionally and physically as their hearing peers.

In the next part, we discuss research in which we offer an elaboration of the interviews of four hearing-impaired participants. We highlight the importance of music and the extent of its positive impact on the personality of individuals with hearing impairment throughout their lifelong development. The possibilities of perceiving music through compensatory aids, playing musical instruments, vocal activities and rhythmic-motor education are part of a more comprehensive mapping of the issue of the effect of music on the quality of life of individuals with hearing loss. Attention is also given to the extent to which music therapy is used for the development of hearing and spoken language skills. We suggest, however, that although music was used in special education interventions for individuals with hearing impairment during childhood, it is gradually disappearing from their lives as it has already fulfilled its supportive role in the acquisition of spoken language. The above research was conducted in collaboration with Peterová [23].

Research findings

The main focus is to verify the importance of music in the life of a person with a hearing impairment. Primarily, we are concerned with its value and impact on human life, and we also want to dispel the myth that there is no link between music and hearing impairment. Another aim is to find out how music can affect the quality of life of a person with a hearing impairment. The partial focus is to compare theoretical findings and foreign research with the testimonies of young people with hearing impairments of German nationality. From the interviews a further aim emerged, to find out the conditions for the development of their relationship to music. In the research, we defined four research questions:

RQ1:How does music affect the quality of life of a person with a hearing impairment?

RQ2:How can we promote the interest of music in people with hearing impairments?

RQ3:What are the possibilities for including music into the education of students/pupils with hearing impairments?

RQ4:How does playing a musical instrument affect the personal development of a child with a hearing impairment?

The research sample consisted of four participants aged between 22 to 24 years. Each of them was a student of German nationality living in Germany.

Participant No. 1 was a twenty-two-year-old student of special education at the Faculty of Education of Ludwig-Maximilian University in Munich. She has hearing loss and auditory perceptual impairment, which were detected at the age of five during her preschool education. Hearing loss is compensated by two hearing aids. Communication has been at an excellent level.

Participant No. 2 was a twenty-two-year-old student of special education at the Faculty of Education of Ludwig-Maximilian University in Munich. She has perceptual hearing loss compensated by the hearing aid (right) and the cochlear implant (left), which was implanted when she was thirteen years old. Her hearing loss was diagnosed in the eighteenth month of her life. Spoken language and intelligibility were at a good level.

Participant No. 3 is a twenty-three-year-old law student at the Faculty of Law of Ludwig-Maximilian University. He has perceptual hearing loss compensated by the hearing aid (left) and the cochlear implant (right), which was implemented when he was thirteen years old. His hearing loss was not detected until he was three years old, which affected the intelligibility of his spoken language. Overall communication was at a good level, thanks also to his mother, who is a speech therapist.

Participant No. 4 was a twenty-four-year-old psychology student at the Faculty of Psychology of Ludwig-Maximilian University. She has perceptual hearing loss compensated by a cochlear implant (right) and a hearing aid (left). Her hearing loss was detected in her fourteenth month of life and a cochlear implant implemented at the age of eleven. Communication was in a very good level.

Research methods

In order to achieve the set objectives, we decided to use a qualitative research method through interviews.

We chose the *interview* as a qualitative method in order to get to know the specific cases of participants with hearing impairment in more details. Due to the circumstances, we opted for an individual form of interview format. Since the interviews conducted with the selected persons did not take place in a single meeting, thus they were not in the nature of a one-time collection of information, but were rather a continuous inquiry and completion, we would describe them as unstructured in type. We had prepared twelve open-ended questions, that were tailored to the specific participant according to his/her answers. The data obtained from the interviews were recorded in the form of audio recordings.

Analysis and synthesis of interviews

To achieve the set goals, we decided to use a qualitative research method through interviews.

Each meeting was conducted in a quiet room in the university building. The interviews were conducted in German. All interviews were recorded, which all participants agreed. Each recording lasted on average of 40 minutes. A verbatim transcription was then compiled from the audio recordings. The interviews had to be translated from German into Slovak. Due to syntactic, morphological and stylistic differences in the two languages, we consider the resulting translation and transcription more of a summary protocol.

The interviews revealed a lot of information about the participant's lives, that would not have been included when comparing the set questions. Based on the analysis and synthesis of the answers, we have grouped this information into three areas: the relation to music, music as part of education and music as part of music therapy focused on hearing rehabilitation, thus creating short and clear case studies of each participant.

Participant No.1

Relation to music: for participant No. 1, music means expressing mood. She listens to every style of music depending on what she is currently experiencing in his private life. At the age of six, she played the recorder. She has tried to learn to play the piano and guitar and would like to learn to play the percussion instruments. She is keen on singing. Her role models are the deaf dancer Cassandra Wedel and the deaf singer Mandy Harvey. Her parents did not introduce her to music.

Music as part of her education: she attended primary school and grammar school, from which she transferred to a highschool for the deaf and hard of hearing. At primary school, the subject of music education was taught.

Music as part of her music therapy: the participant did not take part of any therapy due to her hearing loss.

Participant No.2

Relation to music: her attitude towards music is positive. Due to her type of hearing loss, she perceives deeper tones better. Her favorite music genre is R&B, German music and she likes to listen to rock music. She doesn't like rap, hip-hop or techno. She is keen on vocal-instrumental forms with lyrics. She played the recorder for five years. Her close relationship with the music was formed by her mother.

Music as part of her education: Participant No. 2 attended primary school in Wittenberg and secondary school in Freiberg, and both schools had a focus on pupils with hearing impairments. In the first grade, a subject called “Rhythm” was taught in a special rhythm room. In the second grade, the subject called rhythm-movement education was taught.

Music as part of music therapy: participant No. 2 took part of cochlear implantation at the age of thirteen and had to work a lot with music as part of music therapy. After receiving CI, she describes the sounds as tinny and “robotic”.

Participant No.3

Relation to music: music plays a big role in his life. Since childhood, he has been involved in dance: hip-hop, R&B and poppin’. He enjoys listening to jazz and pop singers as Prince and Nelson. He grew up with music, his father had his own band. At the time of his parents’ divorce, he isolated himself from the society through listening to music. He has been playing the piano since he was seven years old. He worked as a disc jockey for three years. His motto is: “When you can’t do something, you always have to look for a solution” was also reflected in his relationship to music.

Music as part of his education: He attended primary school and grammar school and in both cases was part of a large ensemble. He attended music education in primary school.

Music as part of music therapy: special education care and music therapy after CI was focused on sound perception. He considers listening to hip-hop and rap to be his auditory training through music.

Participant No.4

Relation to music: participant No. 4 is surrounded by musicians in the family. Every member of her family is actively involved in music. The participant has played the flute for four years and the piano for nine years. She danced ballet as a child and currently dances in the hip-hop dance group called Nikkita under the direction of deaf dancer Kassandra Wedel. She is an active singer of the “Choir for the Hearing Impaired”, which she initiated herself. She enjoys listening to acoustic music and Ed Sheeren.

Music as part of her education: After two years in mainstream primary school, she transferred to Waldorf School. At this school everyone had to play a musical instrument. The study also included music therapy, with which she has positive experiences. She graduated from high school at a science grammar school, where she learned four foreign languages.

Music as part of music therapy: therapy within CI was successful due to her passion for music. She participated in drumming workshops organized by the deaf dancer Dodzim. She has been attending a voice teacher for the past three years to help her with voice modulation and singing techniques.

Interview Comparison

Based on the participants' statements, we created a comparison of views to help us answer the research questions. The group of people with hearing impairment is very heterogeneous. Our research sample consists of four participants with different types of hearing loss, the evaluation of the answers is only an assumption. Within the twelve prepared questions, we identified three areas of research. *These are: The relation to music, Music as part of education, Music as part of its therapy.*

1. research area: The relation to music

The answers contain opinions, feelings and attitudes related to the concepts of terms music and hearing impairment. Participants express their relationship to music by describing the experiences of musical activities they have experienced. They characterize the influence of the family environment.

When asked whether it is possible for people with hearing loss to listen and edgage to music, all participants answered in the affirmative. Participants No.1 and No. 2 cites the deaf dancer Cassandra Wedel as an example: *".. if someone loves music despite hearing loss, they can do what they enjoy. And she is a great example that it can be done."* Participant No. 2 concludes by stating: *".. I wish every hearing impaired person to have access to music and to find their way to it"*, suggesting that she considers herself to have access to music despite her hearing impairment. Participant No.4 states that usually every hearing loss is compensated, everyone has a hearing aid or cochlear implant, thanks to which they can perceive music. Or there are deaf people who remember what the music sounded like.

About aswering the question focused on preferences of music genres, we consider that the mere listing of preferred genres is an indication of interest in listening to music. Three of the four participants stated that the choice of music genre depends on their current mood. Participant No. 4 specifies that *"I feel relaxed when listening to music ..."* and Participant No. 3 characterizes that she feels "stories" when listening to music. *"I associate stories with music. When I listen to jazz, it's my family or I associate specific experiences with it."* Hip-hop and R&B, like classical music, were prevalent in these genres.

We were interested if the participants were playing a musical instrument. The answers indicate that each of the participants started playing a musical instrument at preschool or school age. Considering the number of years, we conclude that playing the musical instrument attracted the participants and they persisted in it for a long time. Of the musical instruments mentioned, recorder and piano dominate. Whether the participants are still actively playing a musical instrument was not mentioned. Only participant No. 4 remarked: *“And now I also play when I feel like it, but only my favorite songs, I don’t learn anything new.”* Participant No.3 played the piano during the meeting, which was located in the room where we led an interview.

According to testimonies, the piano appears to be one of the most popular musical instruments. Another popular musical instrument is the guitar. Of the wind instruments, they prefer the saxophone, trumpet and recorder. Participants compare the different instruments, which means that through their compensatory aids they can recognize them and determine which one they like by the color of the sound.

When asked if their parents led them to music, all except of participant No. 1 grew up in an environment in which music was present. Participant No. 2 attended a choir run by her mother, Participant’s Father No. 3 lead a blues band that Participant No. 3 was part of. Participant No. 4 stated that she comes from a very musical family. *“My father plays the saxophone and clarinet, my mother plays the viola in the orchestra, my older sister also plays there, but the violin, the twin sister plays the cello and the piano ..; “My whole family is singing, my father is the choir leader, where my uncle sings and me as well.”*

Given that each of them confirmed their positive attitude towards music with their previous statements, they were likely to have been influenced by the presence of music in the home. However, this may not be the rule, as participant No. 1 found her way to music even without the support of her parents. This fact suggests to us that the musical development of a child with hearing impairment can proceed as naturally as in hearing children. According to the statement of the four participants, we hypothesize that the presence of music in the home can affect the musicality of a child with hearing loss.

From the way the participants characterized their relationship to music, there was a strong emotional charge. As participant No. 4 stated: *“music is an inexhaustible resource for me.”* Participant No. 3, *“it is something that allows me to detach myself from reality. Usually there is a lot of*

noise around us, a lot of loud sounds and when I have to talk all day, I also need a moment of peace and then thanks to the music I can detach myself from reality. That's music for me." As this question was one of the last one we assume that the whole interview contributed to the statements, which focused mainly to their relationship to music and the place of music in their lives.

When asked whether music should be part of everyone's life with hearing loss, participants contributed with positive answers. Participant No.3 put it succinctly: *"Yes, because music has always been a refuge for me, along with sport. Many deaf people who do not listen to any music and are sad or unhappy, lean more towards sport. But I think everyone has to find their own place where they will feel good. (...) So I can't say that music has to be a part of every deaf person. But it can."*

In response to the question whether they know famous musicians with hearing loss, we assumed that the participants would identify with the views of famous musicians. Participant No. 1 stated: *"For me, the role model is Kassandra, who we have already mentioned earlier, and then probably Mandy Harvey, she is a deaf American who almost won a talent show. She was hearing, but she went deaf. And now he can sing thanks to regular exercise and vibration. It's something different, because she remembers what her voice sounded like before and she knows how to work with it because of that."* Despite the more extensive answer, Participant 2 did not feel that the particular musicians represented her role models. Participant No.3 clarified that she identifies with the musical production of hearing musicians.

2. research area: Music as part of education

Each of the participants attended a different primary and secondary school. Due to the heterogeneity of the school system in Germany, the content of teaching varies from one federal state to another. As well as between public and private schools and between mainstream schools and schools for pupils with hearing impairments. The education system in Germany is different from that in Slovak republic, and pupils in the 4th grade of primary school transfer to secondary education – i.e., to a new school. The exceptions is school with a focus on pupils with special educational needs, where they remain after 9th grade as in the case of participant No. 2.

The statements when asked if they had a subject of rhythmic-movement education or music education courses as part of their education show that each of them experienced a different form of subjects of

rhythmic-movement education and music education courses and each of them was also influenced in a different way. Participant No. 1 stated that they had a music education at the school, where they learned to sing songs and do rhythmic exercises. From Participant No.2's statements we learn that, they had rhythmic-movement education at both levels of primary school, where they learned to move rhythmically in a special rhythmic room. *"We did various drum rehearsals, listening to songs that we had to move to the rhythm."* As Participant No.3 describes, his teacher impressed him because of his ability to connect modern music with classical teaching content: *"I had a really amazing teacher, we didn't have classical music education in his classes. He played us Beattles, Prince and a lot of modern music. So everything we needed to know about music was explained to us through modern music, which was very interesting to me. And of course I had to sing too."* The greatest influence can be assumed to be with Participant no. 4, who was able to develop her musical talents on a daily basis at school. We assume that the success of the subject focusing on the development of musical perception also depends on the teacher and her/his musical abilities.

3. research area: Music as part of music therapy

Music and playing musical instruments are an essential part of music therapy focused at hearing rehabilitation and auditory training. Despite the fact that three out of four participants had undergone cochlear implantation, they had different experiences with music therapy. Experiences also differed in relation to their interest in music in their everyday lives.

When asked if music was part of their music therapy, the results were as follows. Participant No. 2 stated: *"As I received CI, I had to work a lot with music. I had to analyse different sounds of musical instruments, for example bells, rattles, jingle bells, I had a lot of auditory training. I also had to learn to recognize two high-frequency instruments, which was very difficult for me. At the beginning, when I got CI, I couldn't actually listen to music, because all the sounds sounded tinny, robotic, I could only hear different noises and the sound was not clear."*

The answer of Participant No. 3 was also interesting: *"I had music in education, which was focused on the development of perception. I was learning to distinguish the differences between loud and soft music, how it sounds in big and small room, how it sounds through an obstacle or to distinguish between intelligible and unintelligible speech, to distinguish where sound is coming from. At the age of thirteen, when I had already gotten cochlear im-*

plant, I started listening to hip-hop and rap, which I also tried to listen to through CIs. Music sounded like a disturbing noise to me then. During the CI setup, I've always said it's nice that people can hear and understand each other, but I want to hear the whole world, not just people. So as part of CI music therapy, I trained to distinguish, for example, between the sound of a braking car and birdsong. And that's where music helped me, because it made me recognize deep and high sounds."

For participants No. 3 and No. 4, music therapy did not remain only at the level of special educational care, but they also devoted themselves to it in their free time. Participant No.3 stated in the interview that listening to hip-hop and rap music was a training itself: "I tried to recognize the voices, I learned the lyrics to make it easier." Participant No. 4, due to her musical training, can recognize if her cochlear implant has to be fixed, she is able to cooperate in setting up and controlling her CI. "I had two types of music therapy. One was such a regular one, where I was learning to perceive sounds and music, and the other within CI, where I had to practise for over one hour with only one ear with CI. So I perceive music better with that ear. I really enjoyed this because I could create my own book of what I was hearing or I had to listen and understand. And especially when you like music and you like listening to it, you can say that you know that high tone is there, but you don't hear it. That's when I go to the technician who is setting the CI and I tell him, "I can't hear that tone, please help me, adjust my CI so that I can hear that tone again."

Participant's answers to the question whether music helped them to improve their speech are indicative. Many experts claim that music affects the rhythm of speech. The answer of participant No. 3 declares the following: „ speech therapy, which I received, is better when there is no music. Because my goal was to learn to hear through CI. The exercises were aimed at understanding the speech of the speakers, their articulation, the oral image. "However, each speech has its own accent and melody, which can be influenced by music. But speech itself or speech intelligibility is less affected. But that melody of speech it certainly affects." But in that case, even though Participant No.3 answered negatively, we could consider his answer to be positive, because melody is part of spoken speech. Participant No.3 automatically recalled his experience with speech therapy under this question. Participant No. 4 also negates her answer at first, but then describes the lessons of voice education and its positive impact on her success of modulation with her voice. Participant No. 4 has a positive attitude towards singing, for which she began attending lessons with a

voice teacher. She describes her first experience in the choir as follows: *“At first I didn’t feel very comfortable there because I was scared that I was disturbing it, I didn’t even sing too loud because I was insecure. And then a friend ensured me that I sing quite well, I just need a voice training.”* On the question of singing in relation to hearing impairment she replies: *„because they think they can’t sing because they’ve never tried it. Or they only sing when they are alone at home and no one hears them.”* Participant 4, through her statement and experience, thus refutes the world’s prevailing opinion that a person with hearing loss cannot sing.

On the question whether participants had experience with music therapy, we report the following. Despite the fact that participants No. 1 and No. 2 had not participated in music therapy, they evaluated its effect not very positively. In the interview, they both agree with the opinion that further therapy could be time consuming for a child with a hearing impairment. Participant No. 1 adds: *“I can only imagine it if the child is really interested”* and participant No. 2 suggests *“I can imagine it if everything was in one center, in one building, where there is a special educator, a speech therapist, and a music therapist as well”*. Participant No. 4 said that music therapy was part of her education: *“at that moment I was able to forget that I had a hearing impairment”* and that music therapy also had a great impact on her personal development.

Evaluation and interpretation of data

Our aim was to point out the importance of music in the life of a person with a hearing impairment. We chose the natural route to information by collecting data through interviews with participants. In the interviews, we did not detect any resistance, reluctance, indifference or passivity towards the topic. On the contrary, the participants showed great interest in the interview, often leading a long monologue in which they tried to give us a characterization of their opinion and stance on the issue. The context often revealed an amusing content that they made evident through laughter. From this we judge that they felt relaxed and the questions were not uncomfortable for them.

Participants’ experiences reflect that even a young person with a hearing impairment is interested in music and often forms part of his life. Thanks to it, they are able to experience their positive and negative emotions more deeply, make full use of their free time and, at the same time, constantly rehabilitate their hearing skills. Playing a musical instrument ennobles them, helps to develop musical skills, also auditory memory and fine motor skills. Music as part of education, therapy and

auditory training offers them the opportunity to improve communication skills. Listening to a particular genre of music characterizes their personality and it is a proof of their ability to select individual genres according to their preference.

In the case of participants No. 1 and No. 3, it happened that they had headphones in their ears to listen to music during our informal meeting and automatically put them down when greeting and starting communication. This phenomenon made us wonder if they really listened to music or just wanted to be included among ordinary people. However, any answer reflects the fact that by this gesture they show to others that they are “worth to music” and want to break down myths about hearing impairment.

Participants’ accounts were consistent with scientific references which demonstrate reliability of available information on the impact of music on hearing impairment. In addition, they declared the variations of possibilities to find the way to music.

Due to the small number of participants, we do not dare to draw conclusions that unequivocally confirm a positive impact on the quality of life of individuals with hearing impairments. However, we assume that this is possible. Through this research, we attempt to contribute to raising awareness of the close connection between music and the hearing impaired. At the same time, we hope that experts will focus on this issue more frequently in their research.

Results and discussion

Summary of research results according to defined research questions:

The purpose of the *first research question was to find out how music affects the quality of life of a person with a hearing impairment*. Nowadays there are more possibilities for cochlear implantation, powerful hearing aids and effective special pedagogical care. We can relatively successfully integrate persons with hearing impairment into society and help them overcome their communication barrier. We respect the fact that just not every hearing person may be musically gifted, so not every deaf person may be interested in music. However, if he or she possesses musical aptitudes and develops them despite hearing loss, his or her quality of life will be reflected in the full satisfaction of needs through musical interests.

The four participants seemed satisfied when talking about music and its impact on their lives. Their life stories reflected their feelings. Partic-

ipant No. 2 started playing the recorder to match the other children in the kindergarten class. Participant No. 1 was interested in playing musical instruments to find out “what is hidden inside her”. It is the most enjoyable experience of listening to a song when she translates it into German sign language and expresses it through movement. Participant No.3 found refuge in music at the time of his parents’ divorce, which helped him compensate of the incompleteness of the family. An admirable ambition was his three-year tenure as a disc jockey. Participant No. 4, thanks to the support of her family, had been in touch with musical activities since childhood. She was a member of the choir, which led her to improve her singing, vocal expression through voice training. On her own initiative, she sought out a voice teacher and worked intensively to develop her vocal skills. The participants clearly expressed the importance of music in their lives.

The second research question focused on ways to promote interest in music among people with hearing impairments. If individuals with hearing impairment experience a positive musical experience, they will seek effective way to keep in touch with music. However, this experience must be offered to them by someone. It is important for a hearing-impaired child to grow up in a stimulating environment with variety of sounds, so that they can make the most of these experiences. With the exception of participant No. 1, the other three participants grew up in an environment that included music. However, we cannot estimate the probability of developing a relationship with music if they had not come into contact with it in childhood.

The third research question was the finding of the possibilities of integrating music into the education of students with hearing impairment. Abroad, especially in the United States, there are various music education approaches that have been used in the education of hearing-impaired students for decades. Over time, they have also begun to develop in Europe, and there are now several functional approaches included in the education for hearing-impaired pupils at schools. As Germany is a country with a fifteen times higher population compared to Slovakia, the music-educational approaches differ. As in Slovakia, the subject of Rhythm-Movement Education is included in the framework curriculum in Germany. However, their national curriculum, Lehrplan Plus, offers a detailed educational area “Rhythm and Music” for primary schools for students with hearing impairments.

Participants' experiences of music-oriented subjects are similar. According to their statements, the teacher has an important position, whose mission is to introduce students to the world of music and at the same time enrich them with musical knowledge. Music in the education of students with hearing impairment has its justification, depending on the approach of individual teachers.

The task of the fourth research question was to find out how playing a musical instrument affects the personal development of a child with a hearing impairment. Music influences a person through reception, interpretation and also production. According to research, in Germany, interpretation of musical instruments has an important place not only in music therapy but also in the education of students with hearing impairments. Wind instruments (e.g. flute) are considered to be the most suitable instruments, through which breathing exercises can be carried out, at the same time they can develop vocal modulation, fluency of speech. The piano is also a frequently used musical instrument, due to the multi-octave tonal range, contains a wide frequency spectrum and penetrating resonance. Playing musical instruments improves motor skills, coordination of both hands (or possibly feet), visiomotor coordination, auditory memory and rhythm perception. At the same time, it contributes to improve the quality of life of an individual with a hearing impairment.

Conclusion

As part of special education practice, we recommend spreading awareness of the positive experience with the music of individuals with hearing impairments. Parental awareness of the impact of music on the child's development is essential. If a child shows signs of musical aptitude, it is recommended that parents support the child to play a musical instrument, to help to develop more than just their musical abilities.

We encourage music educators to fully respect the special needs of students with hearing impairments. Teachers can gain knowledge and skills about the specifics of education of pupils with hearing impairment from the Centers for Children with Hearing Impairments. This also implies the need for multidisciplinary in the special education centers, which would be able to offer music therapy together with surdopedic, speech therapy and psychological care within their counseling services.

We also recommend cooperation with foreign institutions of the same type in order to exchange experiences and knowledge within the symbiosis of both parts.

Systematic work requires further education of music teachers in the form of continuous education in the field of special pedagogy. We also propose that within the framework of higher professional studies at conservatories, subjects of special music education as well as special didactics of music education should be introduced. In this way future music teachers at music schools would gain basic knowledge of specific educational approaches as well as methodological procedures in music education of individuals with hearing impairment.

References

1. Adamek SM, Darrow A. Music in special education. USA: The American Music Therapy Association; 2010. 396 p. ISBN 978-1-884914-26-3
2. Altenmüller EA, et al. Rhythmus: Ein interdisziplinäres Handbuch. Bern: Verlag Hans Hubert; 2000. 368 p. ISBN 978-3-45683-518-1.
3. Brill S, Harnisch W, Möltner A, Müller J. Preoperative pure tone threshold and performance after cochlear implantation. In: Conference on implantable auditory prostheses [Internet]. Tahoe City, CA; 2007. p. 164. Available from: <http://www.ciaphome.org/ciap2013/PDFs/CIAP%2007%20Program%20Book.pdf>
4. Bruhn H, et al. 2008. Musikpsychologie: Das neue Handbuch. Berlin: Rowolt Taschenbuch Verlag; 2008. 720 p. ISBN 978-3-49955-661-6.
5. Büchler M. Musik hören mit dem Cochlea Implantat. In: LKH Schweiz; 2005. p. 15-17. Available from: http://www.uzh.ch/orl/ci-zentrum/ci-infos/ci_musik.pdf
6. Deutsches Zentrum Für Musiktherapieforschung. MusiCI: Musiktherapie in der Frührehabilitation nach Cochlea Implantation - Auswirkungen auf das Sprachverstehen. [online]. 2017 [cit. 2018-4-5]. Available from: <http://www.dzm-heidelberg.de/forschung/aktuelle-projekte/musici-musik-cochlea-implantat/>
7. Drennan WR, Rubinstein JT. Music perception in cochlear implant users and its relationship with psychophysical capabilities. J Rehabil Res Dev. 2008; 45(5): 779-789. [cit. 2018-4-6]. Available from: <https://www.rehab.research.va.gov/jour/08/45/5/Drennan.html>
8. Fehr S. Die Rolle des Gehirns in der (Musik-)Hörwahrnehmung. Spektrum Hören. 2018; 2:48-50. [cit. 2018-4-6]. Available from: <http://www.fehrhoert.com/attachments/article/83/SH%202-2018%20Fehr.pdf>
9. Fehr S, Schulz C-J. Musikmachen & Hörbeeinträchtigung – (k)ein Widerspruch? Spektrum Hören. 2017; 6:38-42. ISSN: 0947-7748
10. Grüning B. Leider machen wir viel zu wenig Musik. Spektrum Hören. 2017; 6:42-44. ISSN: 0947-7748
11. Günther S. Musikpädagogische Konzept für eine Schulband en einer Förderschule. Hamburg: Verlag Dr. Kovač; 2011. 178 p. ISBN 978-3-8300-5430-6

12. Hovorková S, et al. Máme dieťa s poruchou sluchu 2. Bratislava: Nadácia Pontis; 2017. 442 p. ISBN 978-80-89895-08-3. Available from: http://www.dzm-heidelberg.de/forschung/abgeschlossene-projekte/cochlea_implantat/cochlea-implantat-i-hoerenlernen-durch-musiktherapie/
13. Kerekrétiová A, et al. Logopédia. Bratislava: Comenius University; 2020. 341 p. ISBN 978-80-223-4835-5
14. Leonhardt A. Úvod do pedagogiky sluchovo postihnutých. Bratislava: Sapienia; 2001. 254 p. ISBN 80-967180-8-8
15. Madsen S, Moore B. Music and Hearing Aids. Trends Hear [online]. 2014; 18: 2331216514558271 [cit. 2018-4-3]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4271761/>
16. Nogueira W. Auf dem Weg zum besseren Musikgenuss mit Cochlea-Implantat. Spektrum Hören. 2017; 6:12-15. ISSN: 0947-7748
17. Nordoff P, Robbins C. Music Therapy in Special Education. Sant Louis: MMB Music; 2003. ISBN 978-1891278457
18. Orff C. Das Schulwerk. Mainz: Schott; 1964. ISBN 978-3621271103
19. Osvaldová M. Music Therapy as Intervention Dynamism in People with Disabilities. 1 vyd. Bratislava: IRIS; 2015. 216 p. ISBN 978-80-89726-47-1
20. Osvaldová M. Musical Education of Pupils with Special Educational Needs. 1. vyd. Brno: MSD; 2018. ISBN 978-80-7392-2849
21. Osvaldová M, et al. Problematika hudobného vzdelávania osôb so zdravotným postihnutím. Bratislava: Iris; 2020. ISBN 978-80-8200-061-3
22. Peterová K. Vplyv hudby na jednotlivcov so sluchovým postihnutím. (Diplomová práca). Univerzita Komenského v Bratislave, Pedagogická fakulta; 2018.
23. Prause MC. Music und Gehörlosigkeit: Therapeutische und pädagogische Aspekte der Verwendung von Musik bei Gehörlosen Menschen unter besonderer Berücksichtigung des anglo-amerikanischen Forschungsgebietes“. Kolín: Verlag Dohr; 2001. 486 p. ISBN 978-3-925366-89-5
24. Salmon S. Hören – Spüren – Spielen; Musik und Bewegung mit Gehörlosen und Schwerhörigen Kindern, Wiesbaden: Verlag Reichert; 2006. 272 p. ISBN 978-3-89500-470-4
25. Schmidtová M. Teória edukácie žiakov so sluchovým postihnutím. Bratislava: Iris; 2016. 145 p. ISBN 978-80-89726-59-2
26. Seifert J. Das Musik hat mir geholfen, das Hören zu trainieren. Schneck. 2017; 12:24-25. ISSN 1438-6690
27. Schmieder Y. Patienten echo aus zehn Jahren Musiktherapie. Schneck. 2017; 12:22-23. ISSN 1438-6690
28. Spitzer M. Musik im Kopf: Hören, Musizieren, Verstehen und Erleben im neuronalen Netz. Stuttgart: Schattauer; 2004. 480 p. ISBN 978-3-79452-427-3
29. Stelzhammer-Reichardt U, Salmon S. Schläft ein Lied in allen Dingen. Musikwahrnehmung und Spiellieder bei Schwerhörigkeit und Gehörlosigkeit. Wiesbaden: Verlag Reichert; 2008. 233 p. ISBN 978-3-89500-609-8

30. Tarcsiová D. Pedagogika sluchovo postihnutých (vybrané kapitoly). Bratislava: Mabag; 2008. 102 p. ISBN 978-80-89113-52-1
31. Vančová A. Súčasný problémy a perspektívy integrovaného (ink-luzívneho) vzdelávania žiakov so špeciálnymi výchovno - vzdelávacími potrebami v bežných školách. 2001.
32. Vančová A, Osvaldová M. Effects of Orff Schulwerk conception on music abilities of pupils with mental disorder. AD ALTA. 2019; 9(2):261-264. ISSN (print) 1804-7890



COUNSELLING FOR THE LGBTI COMMUNITY IN THE SLOVAK REPUBLIC AND ABROAD

Dorota Smetanová, Mona Hillis

Abstract. The present research study focuses on possibilities of support and counselling for LGBTI people in Slovakia but also abroad; who they can turn to if they need support in what they are experiencing, if they are discriminated, are victims of homo chicane, etc. The study includes results of a research aimed at the most frequent problems of LGBTI people, i.e. coming-out, discrimination, homo chicane or homophobic harassment with subsequent self-harm, depression and suicidal tendencies. It also concentrates on main causes of such condition, such as the ignorance, fear of the unknown or misunderstood and subsequent stereotyping - prejudice. Another possible cause is also the upbringing in a family itself in relation to religious belief as well.

Keywords: counselling, LGBTI community, homophobia, sexual education

Introduction

Sexual orientation involves emotional and/or erotic feelings, fantasies, ideas in relationship to people of either sex, of the same sex or both sexes. Sexual orientation is deemed to be permanent, stable, harmonic with inner experience, which cannot be consciously influenced. During early development, it is modified at conception based on hormonal and genetic factors as well as environmental factors [13]. As we can see, sexuality is very diverse and covers also other, important sexual minorities that are designated by the abbreviation LGBT. It is a designation of a community of lesbian, gay, bisexual and transgender people. The acronym has recently been extended to LGBTIQ to include also people who identify themselves as intersex and queer (those who consider their sexual and gender identities [9; 15]).

What does it mean to be a lesbian, gay, bisexual or transsexual, indeed? Being a lesbian and gay means that the emotional, physical and sexual attraction is directed towards a person of the same sex. These designations indicate who the person fell in love with. Bisexuals are attracted by persons of both sexes. Transsexuals desire to be accepted as members of the opposite sex, do not feel comfortable with their sex. There are also heterosexual and homosexual individuals who are transvestites. Transvestites are people who like to dress in clothes that are associated with the opposite sex [1].

It should be borne in mind that people are born with their sexual orientation; it's not true that they gain it only at a certain period. Revealing one's natural orientation may take a long time and varies from individual to individual. Some people know it from the beginning, while learning one's orientation is a complicated process for others. There are also those who find it out only after years. The period of adolescence is accompanied by changes, uncertainties and tumultuous experience and such period may bring reflections on one's own sexual orientation. It is common that a young man feels sympathies for a same-sex person during adolescence; it can be a friend, teacher, simply anyone from the vicinity. Displays of affection in this period still say nothing about sexual orientation; they can only be a demonstration of the search for oneself. That's why it is very important that young teenagers carefully listen to their body, perceive their own feelings and needs, which can help them in revealing their own orientation. In most cases, a person becomes aware of his or her homosexuality approximately between 13 and 19 years of age [9; 16; 17]. Others can realize it, on the contrary, only after leaving home, during studies or employment.

That's where the complicated process begins, from recognition through acceptance in oneself to a possible confiding to others. This process is called **coming out**. Coming out is an abbreviated term from the English phrase coming out of the closet, which translates as stop turning in on oneself. It consists as if of two parts: - Inner coming out - identification, accepting yourself as a gay, lesbian, bisexual or transgender person. - Outer coming out - confiding one's sexuality and/or transidentity to others.

Coming out is very important for self-acceptance in a self-confident and balanced spirit, when people are not afraid to defend their dignity and human rights. It is also the best prevention of discrimination [11]. It is at the same time a very complicated process, during which people are going through a period of denial and inner conflict. This period lasts until they start accepting themselves and come out to their family, friends and surroundings, and finally celebrate who they are. This period can last a few months for some and even a few years for others [1].

Finding a suitable person for one's coming out is a very complicated process for a young person. A research conducted by authors [13] shows that 71% of the respondents confined their orientation to their friends. These were often friends from the LGBT community or first partners. As one author has put it that confiding to friends may not always be

easy, especially if it happens during puberty. This development stage is characterised, among other things, by adolescents not wanting to differentiate themselves from their peers. Siblings were told this first by 6% and other relatives by 2%. It results from the research that there are also those who have not told this to anyone. They form 2%. There were also cases when the respondents confided to psychologists at first. Teachers or school staff are not even present in the research. As regards parents, only 12% of the respondents came out to their mothers and 1% to fathers. This fact is, on one side, striking, and understandable, on the other side [10.] As one author has put it says due to concerns about alienation or even rejection by the family, people often hide their true sexual orientation. Confiding to friends is a complicated matter but it is not as difficult as confiding to parents. Indeed, friends cannot throw you out of home and, unlike parents, new friends can be found [14].

Parents' responses and method of going through their children's coming out can largely be related to a very close-minded attitude of society towards homosexual issues. The one of ours is still fed by negative stereotypes about gays and lesbians, which leads to **homophobia**. People who have unverified ideas, misconceptions about homosexuals, which are rather concerns and fear of the unexplored, unknown reality and stem from the lack of experience with them suffer from homophobia [13]. The fact that heterosexually oriented people are the majority has influenced and still influences the entire society's attitudes to minorities with a different orientation. While heterosexuality is perceived as "normal", homosexual orientation has been considered in human history (save for some periods) to be sinful, morbid, punishable, or not to be spoken of [9]. Homosexual people of all age categories around the world **experience violations of their human rights**. They are mentally and physically attacked, kidnapped, raped and murdered. In more than a third of the world's countries, people can be arrested and imprisoned, in some countries, the death penalty can be imposed for establishing same-sex relationships.

For this reason, we refer to international human rights conventions covering also LGBT people. The conventions impose an obligation on states to ensure that all people, without exception, have equal rights. Sexual orientation and gender identity are the same status as race, sex, colour or religion. Thus, international law prohibits discrimination on the grounds of sexual orientation or gender identity [3].

Human rights are universal: all human beings have the same rights, no matter who they are or where they live. All states are, regardless of their political, economic and cultural systems, obliged under law to support and protect human rights of all.

The application of international human rights conventions concerning sexual orientation and gender identity is addressed in the Yogyakarta Principles. The principles were proposed and prepared by a group of human rights experts from 25 different world's countries. The principles were adopted in November 2006 at the Gadjah Mada University in Yogyakarta, Indonesia. In November 2017, other additional principles and state commitments on the application of international legal regulations concerning sexual orientation, gender identity, gender expression and sex characteristics were adopted [7]. The Yogyakarta Principles refer to numerous human rights standards and confirm the principal obligation of states to protect the rights. Each of the principles contains detailed recommendations for the states. They reflect the existing status of international human rights laws in relation to sexual orientation and gender identity issues. They at the same time admit that the states may also be incurred other liabilities, whereas human rights laws are under constant development [5].

Counselling for the LGBTI Community - Results of the Research

The definition of the counselling process is based on a client, counsellor and cooperation between them aimed at solving a problem. The counselling is qualified care in any area where clients get answers to their questions from a counsellor or they themselves seek answers through the counsellor. The counsellor is something like a "catalyst" in the counselling process, enabling or simplifying a change and helping the client to realize hidden options to achieve a change in self-understanding as well as in relationships to the surroundings. The counsellor's basic instrument is the counsellor himself or herself; that's why it is important to know one's potential, and, on the contrary, one's limits. The client participates in the counselling process in an analysis of the given problem, while trying to better know himself or herself, his or her motivation, circumstances, causality of his or her behaviour and his or her situation, searching for a new system of operation. The client is willing to take responsibility for a change, while the client-counsellor relationship is about encouraging the client's abilities to solve his or her problems, activating the client's abilities and potential [2]. The client needs to trust, feel safe and accepted [6]. Counselling for LGBT people

is provided by specialized counselling services, especially in the form of legal, psychological and social advisory.

The aim of the research was to map the most frequent questions with which LGBTI people (or their family and friends) turn to counselling centres, i.e. to identify the most common problems faced by LGBTI people. We focused on opinions and attitudes of informants who encounter life situations of LGBTI people on a daily basis, try to solve their problems and help them. A secondary objective of the research was to identify reasons of the persisting mostly negative perception of LGBTI people by society.

Research Questions - are the problems of LGBTI people more often associated with the situation in society in which they live or do their internal problems prevail? Other questions included the following: character (type) of LGBTI people's problems, prevailing type of counselling (psychological, legal, other), impact of the pandemic situation on LGBTI people, causes of the current situation in which LGBTI people find themselves, potential solution of the existing status.

Methods of Data Collection - to conduct the research, we used the quantitative methodology using a semi-structured interview.

Research Sample - Thus, the research was conducted by addressing selecting counselling centres for LGBT people in Slovakia, Czech Republic and abroad.

The informants were as follows: - InPoradňa - informant 1 and informant 2, - Prizma Košice – informant 3, - S barvou ven (PraguePride, z.s.) – informant 4, - Rainbow Fellowship Global Network – informant 5.

The informants are either active counsellors for the LGBTI community or representatives of organizations (societies and associations) providing such services.

Results of the Research

To conduct our research, we chose the quantitative methodology using a semi-structured interview, whereby we generated the following significant categories by open coding:

- 1. *characteristics of people using the counselling services (age, sex, affiliation to the LGBTI community, relationship);*
- 2. *reasons why LGBTI people or their family members contact a counselling centre (coming out, discrimination, bullying, etc.);*
- 3. *type of the counselling services used by the people (legal, psychological, social and other counselling services);*
- 4. *impact of the coronavirus pandemic on the situation of LGBTI people;*

- 5. causes of the prevailing negative perception of LGBTI people;
- 6. potential solutions of the existing situation of LGBTI people.

1. Characteristics of Clients of the Counselling Centres

Selected counselling centres are contacted mainly by young adults. As stated by informant 1, young people often speak up after graduation from a university or college. Informant 2 specifies: *“They are mostly teenagers aged from 14 to 15 years and young adults up to the age of 20 but no more than 35. People over 50 speak up very rarely. For instance, a lady of about 70 also spoke up. She was dealing with her own “coming out.”*

As stated by informant 3, the counselling centre in the City of Košice keeps precise statistics of the people who contact the centre: there are 26 % of the people aged from 15 to 19, 31% of those aged between 20 and 29, and approximately 16% of the people are from 30 to 44 years of age. The counselling centre’s clients over the age of 45 form only 1% of people who contact the centre. The rest of the clients did not state their age.

Foreign counselling centres state, in particular, the age category between 20 and 45 years (informant 5). As stated by informant 4, the representation of clients is as follows: 15 – 18 years – 38%, 19 – 25 years – 21%, 26 – 35 years – 10% and not older than 40 years – 6%. The others did not state their age.

Counselling through LGBTI centres is sought after mainly by people belonging to the community, i.e. people who feel to be different and fall under the LGBTI category (informant 1). Informant 2 confirms that they are mostly the LGBTI people themselves. Informants 4 and 5 share the same opinion. According to informant 3, during the existence of the counselling centre, i.e., during two years, it is 55 % in favour of LGBTI people.

The counselling centre is also contacted by relatives of LGBTI people, especially their mothers. Their fathers call but very rarely (informant 1). Informant 5 states that they are, in particular, their mothers and aunts. Informant 2 has pointed out: *“It’s usually mothers who are interested in their child but it already happened that somebody’s sister called to help her sibling. It also happened that a father of a thirteen-year-old lesbian girl called to help her, as she was having serious problems. She broke up with her girlfriend, had suicidal tendencies and was hurting herself”.*

Informant 3 confirms this experience. In his opinion, fathers of young trans people call more often than parents of LGBTI people. As stated by informant 4, a minimum of family members call. They do not

care about such problems and leave it up to their teenage children to deal with them. Friends and relatives of LGBTI people usually do not contact counselling centres. Informant 1 states that has not happened yet that some of the LGBT people's friends would call to seek help for them. It is addressed by LGBTI people themselves. Informants 2, 3 and 5 confirm this fact with the understanding that it is a very rare phenomenon. Informant 4 states, on the contrary, that it is quite often their friends who contact the centre to help them. They are, however, mostly friends and relatives from the LGBTI community. Men and women contact the centre almost equally. It is not possible to precisely determine it; it's proportionately distributed. As stated by informant 1, both men and women contact counselling centres equally. Informants 3 and 5 stated a similar fact. Informant 2 states a higher number of men and informant 4, on the contrary, a higher number of women: 45% of women and 25% of men. They are then trans men and trans women in approximately the same proportion.

LGBTI people themselves call and write to counselling centres in approximately the same proportion. All people belonging to the LGBTI community do so; there are no differences among them (informant 1). Informants 4 and 5 confirm this fact. According to informant 2, homosexuals, especially men, often contact a counselling centre. They are followed by trans people, mostly men again, who feel to be in a female body and ask for advice concerning transitioning. Informant 3 states that out of 192 people who called the counselling centre, up to 50% were transgender people and the rest is approximately equally distributed among LGBTI people. "Non-binary" people call counselling centres very seldom.

2. *Reasons of Counselling for LGBTI People and Their Family Members*

Clients of counselling centres solve different problems but the most frequent ones include the following:

- discrimination;
- coming-out – both outer and inner;
- relationship issues (within a family, partners, friends);
- legal advisory (on setting up "rainbow families" and raising children);
- bullying.

According to informant 1, it mainly concerns:

- regulation of relationships in families and the related marriage assistance;

- solving life situations – between parents and their children;
- cases of discrimination;
- problems of transgender people whom society cannot understand or accept and who are not supported by society when changing themselves;
- bullying cases (for instance, a girl living in a dormitory had a different orientation and the only way out was to move to a different room, which helped for some time).

Informant 2 states that it is mainly coming-out. Coming-out can be classified as inner and outer. Inner coming-out is when the person himself or herself has to come to terms with his or her orientation, even though he or she may not like to admit it. Outer coming-out is when the person accepts himself or herself and is ready to confide to his or her family and friends. It is a lengthy process, as the person is afraid how others in society will perceive him or her. This is then followed by questions about how to tell this about himself or herself and how to do so most suitably. There is also parental coming-out, when parents themselves struggle with accepting their child's orientation. They learn to talk about it not only with their children, but also with the surrounding relatives. They sometimes also seek help from parents who have the same experience with their children. Mutual communication is very helpful in building better relationships. In other cases, it concerns gender dysphoria, where it is transgender people's coming-out. They are afraid of how society will perceive them (acceptance - non-acceptance), and that's why they have barriers in relationships with people, they watch and censor themselves in order that their identity is not revealed.

LGBTI people often solve partner relationships, communication problems, conflicts and setting boundaries. However, if teenage people speak, it is usually because of their friends and coming-out in family. Transgender people call and write to counselling centres mainly with regard to their transitioning, whether social, health or legal.

Informant 3 states that transgender people seek medical and psychological facilities because of their own change. The following legal issues as well as social problems are often addressed:

- transition-related health care;
- coming-out (they ask how and on which occasion to do it);
- self-acceptance (inner and outer);
- relationships issues like partners, parents and friends;
- other contacts with LGBTI people.

Coming-out is highly important especially for transgender people. For some of them, social transition is primarily important, which means telling the loved ones and family about it at first; this is usually followed by health transition, which is discussed with experts, and the last one tends to be legal; nevertheless, it's always very subjective.

The L-G-B sub-group addresses the following issues most frequently:

- coming-out;
- relationship issues;
- contacts with other LGBT people.

Another reason for contacting a counselling centre is bullying in schools.

Informant 4 states: *“Trans people who have undergone their transition call and talk about their problems they are unable to solve by themselves. Bullying in elementary schools on the grounds of orientation is often addressed. And, last but not least, also coming-out itself. They are looking for different information that could help them.”*

According to informant 5, it mainly concerns the following: *“discrimination, rejection by parents and society and questions about whether it is possible to find asylum in another country. Questions related to self-acceptance are also frequent.”*

Relatives of LGBTI people deal mainly with bullying of their children, subsequent states of depression, self-harm, etc. They also ask for advice how to help their children in the area of transition. They often ask for contacts to people having the same experience with their children. Informant 3 states with respect to this topic that they address how to best help their children with their identity issues, concerns about and fear of their child being bullied, concerns about whether their child will have a good life in society, i.e. a good future. Parents of young trans people call very often – compared to parents of L-G-B people. It concerns, in particular, the child's health situation, when the transition is already permitted after the age of 18. They also look for other transgender parents to share their experience and call also to get psychological advice.

As indicated by informant 5, relatives (especially mothers) address their children's coming-out and bullying most frequently.

Counselling centres for LGBT people have addressed/address also problems like suicide, depressions, self-harm. As stated by informant 2: *“... psychological reductions as well as psychological interventions have already occurred, meaning that some people already have suicidal attempts behind them and, in case of others, prevention is carried out to avoid their self-*

harm. It happened that a counselling centre had to contact the police and send them to the given person's home to prevent his or her potential self-harm".

Informant 2 adds that the usual procedure is to contact relatives at first to let them know that somebody from their family that someone in their family is in a life-threatening situation and the relatives subsequently contact the police. If no contact to the relatives is available, it is definitely necessary to call the police; however, the counselling centre is obliged to keep confidentiality as regards its clients and state only important points, i.e. not everything. Otherwise, it would violate a counselling agreement. It is also necessary to prevent self-harm attempts so that it doesn't go too far. The patient's post-hospitalization stability is also important.

Informant 4 states it happens a couple of times per year that right such people with depressions and signs of self-harm write or call but it is more suitable in such cases to contact a helpline, which will certainly help them better than an LGBT counselling centre. Informant 5 also states clients with suicidal tendencies, depressions and signs of self-harm. The counselling consists, in particular, in the provision of psychological assistance.

3. Type of the Counselling Services Provided

Almost all of the contacted counselling centres provide psychological, social and legal advisory.

(The Czech counselling centre S barvou ven does not provide legal advisory). In Poradňa currently concentrates mainly on the provision of legal advice.

As stated by informant 1, the counselling centre provides legal advice in the area of addressing discrimination on the grounds of sexual orientation and gender identity at work, taking legal action under the Anti-Discrimination Act, co-existence and relationships, such as, for instance, succession, representation before authorities, transition and legal gender recognition, drafting criminal complaints, for instance, due to bullying on the grounds of sexual orientation or gender identity.

Informant 3 states that the counselling centre provides legal advice on hate crimes concerning discrimination in the school and work environment, regulation of cohabitation of queer couples, parenthood as well as transition.

According to informant 2, within about two years, the counselling centre has helped over 300 people from the LGBT community who were seeking, within the psychological counselling, assistance mainly in the

area of coming-out (inner and outer). This concerns also parental coming-out – acceptance of one’s own child.

Informant 3 states that the assistance within psychological advisory concerns accompaniment and support in the coming-out process, self-acceptance process, in solving negative consequences of homo/bi/transphobia, etc.

The Czech counselling centre provides, in particular, on-line advice, the so-called services of mentors” – people belonging to the LGBT group or their relatives. Support groups are set up for the LGBT people themselves as well as for their parents. According to informant 4, a support group named *Nájdí svoju farbu* (Find Your Colour) addresses, above all, coming-out. People may contact their mentors – they select them by profiles and talk to them about their problems.

Social counselling concerns, as stated by informant 3, mainly job-search consultations, communications with the Labour Office, social and health insurance companies, etc., medical transition as well as assistance in finding healthcare related to sexual health.

The counselling centre in the City of Košice has a special advisory section for transgender people. Informant 3 states that it concerns, in particular, help with getting health care related to transition, accompaniment in identity-related issues, assistance in legal transition (change of name, surname, birth number) and assistance in social transition (coming-out support).

4. *Impact of the Coronavirus Pandemic on the Situation of LGBTI People*

As stated by counsellors and managers of the counselling centres, the interest in counselling has significantly increased during the pandemic. People are trapped at home; the only possibility to meet other people within the community is to do so on-line. The transition process has also been discontinued, as the health capacities are currently insufficient. This brings, above all, mental problems but sometimes even violence (both physical and mental).

Informant 1 claims that “... *isolation is the first of the reasons why the pandemic negatively affects the LGBT community. This situation has caused a major increase in the number of clients. Potential causes are due to coming out in family that does not understand their child and does not accept the child as he or she is. It at the same time concerns stressful situations when LGBT people cannot go out and relax in their community. The personal transition process of transgender people is delayed, which may negatively affect*

their health. There are currently not capacities available for this in the health sector.”

Informant 2 has a similar experience. He states that at the beginning of the pandemic, it might have been all right for some people, as they could have social phobias and anxieties among people; this is why there was an improvement for them – they oriented only in their community or family. If they did not have good relationships within their own families, at least the community was always here for them and did not disappoint them. Gradually, however, there were also feelings of loneliness. Yet, if they were in partner relationships, it was manageable and they could support each other. Yet, it was more difficult for some people, especially in their family environment, if they were not accepted by their family. They were and, in fact, are forced to remain in an environment that is not pleasant for them and where they are not satisfied. This also concerns transgender people who have to postpone their treatment and own change – the health service is not keeping up.

Informant 3 states that: *“Now, during these months, the situation is getting worse as people are staying home – it may be an unfavourable environment for some LGBT people, especially if they are not accepted by their families. Domestic as well as sexual violence is quite frequent nowadays; thus, anyone can now be in danger. For instance, transition is also discontinued now but I otherwise think that all community members are affected by this equally. They can move only in on-line premises, have no socialization”.*

According to informant 4, the impact of the pandemic is not recorded in statistics but a lot of people surely experience anxiety and restlessness states nowadays, having regard mainly to their being constantly imprisoned at home only and being unable to move more – in their own environment, in their own community.

5. Causes of the Prevailing Negative Perception of LGBT People

We state based on book publications, available articles on the Internet and, last but not least, the quantitative research conducted by us, that negative perception of LGBTI people prevail in the world. In general, such status is somewhat more favourable in democratic countries than in totalitarian regimes. Despite this, Slovakia is homophobic. The situation is somewhat better in the Czech Republic (mainly as regards the legislation – e.g. registered partnerships).

According to informant 1, the reason of negative attitudes to LGBT people include the prejudice formed in parents, who later pass them on to their children.

Informant 2 also states the following reason: *“Here, a well-known fact is confirmed - prejudice. This is quite often a consequence of people not knowing LGBT people. This is why they have distorted and stereotyped images.”*

Informant 3 claims that: *“there are two main causes, specifically: political, as it’s where framing is applied, there are also extreme parties in politics, alliances for family (which is against LGBT people), as well as fascist and religious parties – the problem is also what the Roman Catholic Church proclaims.”*

Informant 4 thinks that it is the ignorance of people – maybe they don’t know anyone in their neighbourhood and this is why they condemn LGBT people. The rainbow march Pride is sometimes also negatively referred to, when people sometimes appear in leatherettes and other “offensive” cloths – but showing how such people feel is the point there rather than being eccentric.

Informant 5 is convinced that a potential cause of the homophobic moods is, in particular: religion.

In some cases, LGBT people themselves are also responsible for inciting homophobia by their immoral lifestyle.

We can finally state the following main causes of negative moods towards LGBT people:

- prejudice and fear of the unknown (stereotypization);
- religion;
- education in family, and
- rarely, immoral lifestyle of LGBT people.

6. Potential Solutions of the Existing Situation of LGBT People

The informants state the following as a potential solution of the current situation of LGBT people:

- awareness-raising through well-known people having a different sexual orientation;
- legislative support of the LGBT minority (in our country, introduction of a possibility of registered partnerships and adoption also by such couples);
- intensifying the teaching of sexual or family education;
- prevention programs within the first grade of elementary schools already.

Informant 1 claims that: *“It would primarily be quite helpful, if the political world changed – legislative changes, that’s why I have myself entered politics. I want to push for people to take notice of the LGBT community. It would help significantly, when significant personalities also came out and talked about it openly to change people’s view of the world”.*

According to informant 2, someone's prejudice can gradually "melt" when the person gets to know somebody with a different orientation in person and if, for example, a friendship develops between them. It would certainly be also helpful, if more openly living LGBT people were found. It would also be suitable if well-known personalities with a different sexual orientation living in Slovakia also openly talked about it – showed others that it is possible to lead a high-quality life also like this. However, such people are often forced to live in isolation – mainly in their on-line communities. It would also be good to strengthen political campaigns and support such people in order that Slovakia views LGBT people in a different light.

As informant 3 says: *"... it would be best, if changes occurred mainly in the political and religious areas, as it would help LGBT people most. A great benefit will be, if a liberal party gets into politics. Other opportunities for change are for celebrities to make a statement about their identity or orientation. And, of course, it would be suitable, if the parents themselves stood up for their children. The required change should also occur in the educational and prevention system in schools; these systems are currently failing"*.

In the opinion of informant 4, it would be good, if people who are in a homosexual partnership also showed themselves more and were not ashamed of their orientation; it could change opinions and perception of the LGBT community in a positive direction.

Informant 5 confirms that the situation will improve when the prejudice and the fear of the unknown are removed mainly by educating children to be tolerant towards the LGBT minority.

Conclusion and Recommendations

Results of the research may be used in practice when solving problems of LGBT people in a better targeted counselling activity, more thorough preparation of activists for rights and positive perception of the LGBT minority, counsellors, lawyers, social pedagogues and, last but not least, doctors (especially in relation to transgender people), as well as in information activity provided by websites intended for LGBT – FAQ (frequently asked questions) – the so-called "tailor-made counselling".

Despite the existence of counselling centres for LGBT people in Slovakia, their number seems to be insufficient. The need for advice has increased especially during the SARS-CoV-2 pandemic. Some of the counselling centres have even limited their services to a minimum due to the pandemic situation (lack of financial and human resources). We think that the results of the research can be applied mainly in two areas,

specifically, in the educational process, provided for by family, and *in the process of prevention implemented in schools*.

It is therefore important that it is primarily family that will educate their children towards tolerance also towards sexual minorities, will be open to its children and provide them with undistorted, true and sufficient information. We deem the family's attitude to education as highly important especially in the current era of the rapid technical progress and new technologies allowing children from a young age to access any, not always reliable and relevant, information via the Internet, social networks, etc.

The other area of potential application of results of the research is the school environment. This concerns the implementation of preventive activities in primary and secondary schools (preparation of a concept, form, content, activities, evaluation), as well as the preparation of curricula within the framework of **sexual and family education**.

The prevention program can be implemented in elementary schools through a prevention coordinator as a teaching staff specialist, social pedagogue or through a school psychologist or educational counsellor. Another possibility in the school environment is to intensify the teaching of sexual or family education in elementary and secondary schools based on the existing status and information.

Currently, the teaching of sexual education in the Slovak Republic is governed by the curricula of the subjects of which it is part (e.g. civic education, ethics education, religious education, biology). The curricula themselves are prepared for the subject named "Marriage and Parenthood Education", however, they are optional [8]. Sexual education as a separate subject is not taught in schools, the teaching is on a voluntary basis.

The main goal of the sexual education is not the fulfilment of marriage and parenthood but the preparation for a satisfied sexual life with an accent on potential psychological and physiological problems that may occur in relation to sexual life. This is why we believe that the knowledge available within sexual education provides background information for compiling curricula, which vary depending on the culture of the given country. Curricula are largely affected by values and standards preferred by the given society [12].

Despite the knowledge from the ancient history of homosexuality, when homo- trans- or bisexuality were not only tolerated but also – in some cases – almost required by society, negative moods towards sexual

minorities currently prevail on a global scale. Thus, many ecclesiastical authorities still deny the existence of homosexuality as such and consider this condition as a treatable mental disease. Eradicating the ingrained prejudice, whether of a religious character or given by upbringing, is a very difficult and challenging task. It will take several decades, if not centuries, before it will be possible to say that the world is tolerant towards LGBT people. We think that a significant factor that will contribute to a change of mindset is the positive promotion of LGBT people, raising awareness and thereby also fighting against the existing prejudice, deeply rooted especially in non-democratic states.

We believe that making information about the LGBT community with a wide global reach available, proper explanation and perception of the existing problems encountered by the people on an almost daily basis, can change the negative perception of their image in many countries. We suppose that where a high level of awareness is ensured, primary prevention is implemented in elementary schools already, last but not least, also sexual and family education, there is a possibility of a positive change in issues of LGBT people.

In the sense of Viktor Frankl's famous quote: "*Being a human is not a fact, it is a possibility*", let us also use this possibility and be "humans".

References

1. Bass E, Kaufman K. *Láska je láska*, knižka pre lesbickú, gayskú a bisexuálnu mládež a jej spojencov. Bratislava: Aspekt; 2003. 274 p. ISBN 80-85549-40-9
2. Gabura J, Pružinská J. *Poradenský proces*. Praha: Sociologické nakladatelství; 1995. 147 p. ISBN 80-85850-10-9
3. Gender.gov.sk. *Práva LGBTI ľudí. Rodová rovnosť a rovnosť príležitostí. Často kladené otázky* [online]. [cit. 8.4.2021]. Available from: <https://www.gender.gov.sk/aktivity/temy/prava-lgbti-ludi/>
4. Hillis M. *Poradenstvo pre LGBT ľudí*. Bakalárska práca: Univerzita Komenského v Bratislave; 2021.
5. *Jogjakartské princípy* [online]. Úrad vlády Slovenskej republiky. Copyright 2011. [cit. 12.4.2021]. ISBN 978-80-8106-037-3. Available from: <https://www.vlada.gov.sk/jogjakartske-principy/>
6. Kopriva K. *Lidský vztah jako součást profese: Psychoterapeutické kapitoly pro sociální, pedagogické a zdravotnické profese*. Praha: Portál; 1997. 147 p. ISBN: 8071783188
7. Kuby G. *Globálna sexuálna revolúcia – strata slobody v mene slobody*. Bratislava: Lúč; 2013. 416 p. ISBN: 978-80-7114-922-4
8. Libáková L. 2017. *Sexuálna výchova ako nástroj na prevenciu rodovo podmieneného násillia*. In: Balogová B, Skyba M, editors. *Aktuálne výzvy pre*

- sociálnu prácu. Prešov: 2018. p.151-158. ISBN 978-80-555-2076-6. Available from:<https://www.pulib.sk/web/kniznica/elpub/dokument/Balogova14/sub-or/Libakova.pdf>
9. Lukšík I, Supeková M. Sexualita a rodovosť. Bratislava: Humanitas; 2003. 172 p. ISBN 80-89124-01-1
 10. Nedbáľková K. Matky kuráže: lesbické rodiny v pozdne moderní spoločnosti. Studie. Praha: Sociologické nakladatelství (SLON) ve spolupráci s Masarykovou univerzitou; 2011. 119 p. ISBN 9788074190414
 11. Procházka I. Coming out: Průvodce obdobím nejistoty, kdy kluci a holky hledají sami sebe. Brno: STUD Brno; 2002. 36 p. ISBN 80-238-8850-1
 12. Rapošová P. Hrové trendy v kontexte sexuality. Sexuality 9. Brno: IMS; 2016. ISBN 978-80-88010-05-0
 13. Smitková H, Kuruc A. Odporúčania a podnety pre psychologov a psychologičky, ktorí pracujú s lesbickými/ gejskými/ bisexuálnymi/ transrodovými (LGBT) klientmi a klientkami. Bratislava : Iniciatíva Inakosť; 2012. 90 p. ISBN 978- 80.970856-0-5
 14. Sobotková I. Psychologie rodiny. Praha: Portál; 2007. ISBN 80-7178- 559-8
 15. Vančová A, Kečkéšová M. Legislatívne a inštitucionálne aspekty pomoci osobám so zdravotným znevýhodnením. 1. vyd. Užhorod: RIK-U;;2017. 242 p. ISBN 978-617-7404-74-2
 16. Vančová A, Kečkéšová M. Sociálna politika - a právo ako prostriedok ochrany osôb so zdravotným znevýhodnením v SR = Social policy - and law as a means of protection of persons with disabilities in Slovakia. 1. vyd. Magdeburg: Europäische Bildungswerke Für Beruf und Gesellschaft e. V.; 2019. 265 p. [print] ISBN 978-3-00-064649-2
 17. Vančová A, Kečkéšová M, Smetanová D. Ochrana práv dieťaťa a rodiny v Slovenskej republike rámcovaná platnou legislatívou [elektronický zdroj]. 1. vyd. Bratislava: Slovak education publishing; 2017. 217 p. [CD-ROM] ISBN 978-80-89834-03-7



FAMILIÄRE STÖRUNGEN – IHRE AUSWIRKUNGEN AUF DIE ERZIEHUNG UND BILDUNG DES KINDES

Marta Kečkěšová, Alica Vančová

Zusammenfassungen. Wir identifizieren die vorliegende Problematik der Kindererziehung und -bildung in der Familie unter rechtlichen, sozialen, pädagogischen, sonderpädagogischen und psychologischen Aspekten und versuchen einen Raum für einen vergleichenden Lösungsansatz zu schaffen. In unserem Beitrag analysieren wir das soziale Umfeld der Familien und die Auswirkungen auf die Erziehung und Bildung von Kindern, die zur Gruppe der Benachteiligten gezählt werden können und das aus verschiedenen Perspektiven. Wir richten die Aufmerksamkeit auch auf die ethischen und rechtlichen Fragen, die die Stellung der Kinder im Familien- und Wohnumfeld positiv, bzw. negativ beeinflussen. Das Ziel ist es, auf die Faktoren hinzuweisen, die die Lebensqualität im Zusammenhang mit den Bedingungen des sozialen Umfelds und seine Auswirkungen auf die Integration prägen. In Anbetracht der Komplexität des Problems halten wir die Analyse der modernen Trends im Bereich der sozialen Rehabilitation von Familien mit minderjährigen Kindern für vorrangig. Einer der wichtigen Faktoren, der die Lebensqualität der Kinder beeinflusst, ist die Frage der Selbstverwirklichung und die Erschaffung von Bedingungen für ein würdevolles Leben.

Stichwörter: Familie, Ehe, Kind, Erziehung, Bildung, Gesetzgebung, Erziehungsmaßnahmen, Konfliktvormund, Pflegefamilie, Heimunterbringung.

Einführung

Mit der Definition des Begriffes Familie beschäftigen sich Expertenteams von Autoren, die sich mit der Familie als einer Institution befassen, die traditionell als Grundlage der Gesellschaft angesehen wird. In der Slowakischen Republik ist der Begriff Familie definiert im Artikel 2 des Gesetzes 36/2005 des Gesetzblattes der Slowakei über die Familie und über die Änderung und die Ergänzung mancher Gesetze in der Fassung späterer Vorschriften. Gemäß der genannten Vorschrift „ist die durch die Ehe gegründete Familie die Grundeinheit der Gesellschaft. Die Gesellschaft schützt alle Formen der Familie.“ Im Rahmen des traditionellen Familienmodells bietet das Rechtssystem der Slowakischen Republik Schutz und Unterstützung der Familie, die nicht nur traditionell durch die Ehe entstanden ist, sondern auch der Familie, die auf der Grundlage des Zusammenlebens von Partnern gebildet ist und die im gegenseitigen Einvernehmen Kinder erziehen. Es handelt sich um eine

nicht-traditionelle, moderne Form der Familie, die im Gegensatz zur traditionellen Familie steht. Die Familie stellt für das Kind ein unersetzbares Umfeld dar. In der Slowakischen Republik räumen die einschlägigen Rechtsvorschriften jedoch der Familiengründung durch Heirat Vorrang ein. Die Grundprinzipien des Familiengesetzes Nr. 36/2005 GBl. der Slowakischen Republik und über Änderungen und Ergänzungen mancher Gesetze in der Fassung späterer Vorschriften bedeuten daher, dass der Schutz der Ehe in der nationalen Gesetzgebung behandelt wird und dass weiterhin die Tendenz besteht, vor allem die durch die Ehe gegründete Familie als Grundeinheit der Gesellschaft zu betrachten.

In der Gesellschaft gibt es nach wie vor Meinungsverschiedenheiten darüber, wie die Familie gestaltet werden sollte. Es ist jedoch unbestritten, dass neben dem Gesetz Nr. 36/2005 GBl. über die Familie und über Änderungen und Ergänzungen mancher Gesetze in der Fassung späterer Vorschriften und auch die Verfassung der Slowakischen Republik, die die Charta der Grundrechte und Freiheiten respektiert, im Art. 41 den Schutz der Ehe und der Familie auch dann garantiert, wenn die Familie nicht auf der Grundlage einer ehelichen Verbindung gegründet wurde. Die Entwicklung der Gesetzgebung in einigen europäischen Ländern ermöglicht im Rahmen der geltenden Gesetzgebung die Gründung einer Ehe und einer Familie auch für gleichgeschlechtliche Partner. Damit rücken auch die Fragen der Elternschaft und der elterlichen Rolle bei der Kindererziehung in einer solchen Familienform in den Mittelpunkt. Obwohl die Slowakische Republik ein Mitgliedstaat der Europäischen Union ist, bleibt die Familienpolitik als Teil der Sozialpolitik in der Zuständigkeit der einzelnen Mitgliedstaaten der Europäischen Union. Die Vielfalt des Wertesystems auf Grund spezifischer kultureller und religiöser Traditionen beeinflusst auch die Entwicklung des Familienrechts und seine Anwendung in der Praxis.

Die Familie als soziales System

Trotz der geltenden Rechtsvorschriften verändert sich die Struktur der Familie in der Slowakischen Republik, was sich auch anhand statistischer Daten beurteilen lässt. Diese deuten darauf hin, dass die Zahl der vollständigen Familien, die auf einer Ehe beruhen, abnimmt und die Zahl der Familien, die auf einer Lebensgemeinschaft basieren, zunimmt, ebenso wie die Zahl der unvollständigen Familien, d. h. der Familien mit nur einem Elternteil. Solch eine Familie kann sowohl aus einer alleinstehenden Frau mit einem Kind wie auch aus einem alleinstehenden Mann mit einem Kind bestehen. Ein-Eltern-Familien können

auch durch das Auseinanderbrechen der Familie entstehen, das durch eine Vielzahl von Faktoren verursacht werden kann. Einer der häufigsten Faktoren ist die Unfähigkeit, Stresssituationen des Familienlebens zu bewältigen, wodurch die Familie in eine Krise gerät, die zu ihrem Zerfall führen kann. Die Störungen in der Familie können auch durch Arbeitslosigkeit, mangelnde finanzielle Absicherung der Familie usw. verursacht werden. Die Tatsache, dass die Familie dysfunktional wird, kann die Erziehung des Kindes gefährden, was eine Reihe von negativen Auswirkungen auf das Kind, aber auch auf andere Familienmitglieder haben kann. Die Familie als soziales System entwickelt sich ständig weiter, und die Stabilität der Familie ist mit ihrer Entwicklung verbunden [Gabura, 2012]. Die Wertorientierung des Kindes wird durch das Wertesystem der Familie des Kindes beeinflusst, was sich sowohl positiv als auch negativ auf das Kind auswirken kann. Die Familie ist durch einen Zyklus von einzelnen Phasen der Familienmitglieder gekennzeichnet. Insbesondere die Frage der Aufnahme des Kindes in die Familie ist von großer Bedeutung und beeinflusst erheblich die Beziehungen zwischen den Ehegatten in der Position als Eltern. Die Aufnahme eines Kindes kann auch durch die Geburt eines behinderten Kindes beeinflusst werden, wenn die Eltern sich nicht um das Kind kümmern können und Konflikte entstehen, die das Zusammenleben innerhalb der Familie insgesamt beeinträchtigen [Harčáriková, Ondičová, 2020]. Dies führt zu Veränderungen sowohl in den Beziehungen der Ehegatten als auch in ihrem Status als Eltern, da sich nicht gleich zu Beginn des Lebens des Kindes eine starke emotionale Bindung zwischen den Eltern und dem Kind entwickelt. In Erwartung der Geburt eines gesunden Kindes und anschließend die Geburt eines behinderten Kindes kann dazu führen, dass es den Eltern schwer fällt, das Kind in die Familie aufzunehmen und mit den daraus resultierenden Einschränkungen in der Familie umzugehen. Daher ist in diesem Fall für die Eltern des behinderten Kindes auch professionelle Hilfe erforderlich und das nicht nur von Psychologen, sondern vor allem durch einen Sonderpädagogen, der angesichts der Art der Behinderung professionelle Hilfe leisten kann, damit die Akzeptanz der Situation nicht zum Scheitern der Ehe und damit der Familie führt.

Angesichts der aufkommenden neuen Phänomene und ihrer Folgen auch in Bezug auf den sozialrechtlichen Schutz der Familienmitglieder, kann das Recht nicht nur als wissenschaftliche, sondern auch als praktische Disziplin betrachtet werden, die sich in der Praxis auch mit den

Auswirkungen der wirtschaftlichen Veränderungen auf die Familie befasst. Die Familie verändert sich also aufgrund neuer Phänomene. Die Unterstützung der Eltern, das sogenannte Coadjutórium-Beistand, richtet sich sowohl an Minderjährige als auch an erwachsene Kinder, die auf die Hilfe der Gesellschaft angewiesen sind. Es ist nicht von der Hand zu weisen, dass die Gesellschaft ihre Aufmerksamkeit auf den Schutz der Familie als Ganzes, aber auch auf den Schutz einzelner hilfsbedürftiger Familienmitglieder richtet. Damit eine Familie jedoch funktionsfähig ist, muss es Harmonie in der Familie als Ganzes sowie in den einzelnen Beziehungen zwischen Familienmitgliedern geben. Damit beide Faktoren zusammenwirken können, ist die familiäre Kommunikation wichtig, d. h. die Fähigkeit zum Dialog zwischen Eltern gegenseitig und zwischen Eltern und Kindern sowie zwischen anderen Familienmitgliedern, sei es die eigene oder eine Ersatzfamilie. Die Qualität der elterlichen Beziehungen und ihr Zusammenleben ist ein gutes Vorbild für Kinder und ihr Verhalten, nicht nur in der Zeit der Kindheit, sondern auch bei der Gründung und dem Funktionieren ihrer eigenen Familie.

Trotz der Tatsache, dass nach geltendem Recht die Eltern im Rahmen des Geschlechterprinzips den gleichen Status und die gleichen Rechte und Pflichten gegenüber dem Kind haben, herrscht nach wie vor die Meinung, dass die Mutter in der Familie in Bezug auf die Kinder Vorrang hat, was sich auch in der Praxis widerspiegelt. Trotz der Verpflichtung, die sich aus den Bestimmungen des geltenden Rechts ergibt, werden minderjährige Kinder im Fall einer Trennung der Familie im Allgemeinen in die Obhut der Mutter anvertraut, obwohl beide Geschlechter gleichgestellt sind. Änderungen im Bereich des Sozialversicherungsrechts wirken sich auch auf die gängige Art der Betreuung eines minderjährigen Kindes aus, da die einschlägigen Rechtsvorschriften auch dem Kindesvater die Möglichkeit geben, das Kind durch die Gewährung staatlicher Leistungen wie Mutterschaftsgeld, Elterngeld oder - im Fall eines behinderten Kindes - Pflegegeld zu betreuen. Dies gibt dem Vater die Möglichkeit, sich ganztägig um das Kind zu kümmern. Auch bei der persönlichen Betreuung des Kindes durch einen Elternteil hat es eine Veränderung gegeben, so dass nach § 24 Abs. 2 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über Änderungen und Ergänzungen mancher Gesetze in der Fassung späterer Vorschriften, beide Elternteile an der Erziehung im Rahmen der alternierenden persönlichen Betreuung teilnehmen können, wenn diese Form der Betreuung dem Wohl des Kindes dient.

Das Rechtssystem regelt durch die Gesetzgebung die Pflichten der Eltern in anderen Bereichen, die miteinander in Verbindung stehen, wie Bildung, Gesundheitsschutz usw. Dazu gehören das Schulrecht, das Strafrecht und auch Rechtsvorschriften der Gesundheitsversorgung, soweit es sich auf die Erziehung und Bildung von Kindern und den Schutz ihrer Rechte bezieht.

Verfassungsmäßige Rechte und Pflichten der Eltern bei der Erziehung und Bildung der Kinder - Lösungen

Das Recht der Eltern auf Betreuung und Erziehung ihrer Kinder wird in erster Linie durch Art. 41, Absatz 4 der Verfassung der Slowakischen Republik und durch andere gesetzliche Vorschriften garantiert. Dieses Recht kann nur durch eine gerichtliche Entscheidung und nur aus rechtlichen Gründen eingeschränkt werden. Der Eingriff in die verfassungsmäßigen Rechte der Eltern hängt von den verschiedenen Arten Störungen in der Familie und deren Ausmaß ab. Laut Dunovský [1986] gibt es drei grundlegende methodische Ansätze für den Umgang mit Störungen in der Familie des Kindes und zwar:

- a) der ätiopathogenetische Ansatz, d. h. die Ermittlung der Ursache der Störung,
- b) der symptomatologische Ansatz zur Ermittlung des Ausmaßes und der Art der Störung
- c) das therapeutische Prinzip der Notwendigkeit, d. h. die Notwendigkeit eines Eingriffs zur Beseitigung der Störung

Der Autor bringt auch andere Störungen mit den Funktionen der Familie in Verbindung, wie z. B. die Störung der wirtschaftlichen Sicherheitsfunktion, die Störung der emotionalen Funktion und die Störung der Sozialisationsfunktion. Die Art der Störungen der oben genannten Familienfunktionen wirkt sich negativ auf die Stabilität des familiären Umfelds aus, die für das Funktionieren der Familie als Ganzes und ihre Fähigkeit, eine angemessene Erziehung und Betreuung des Kindes zu gewährleisten, von wesentlicher Bedeutung ist. Laut Grófová [2009] können die Ursachen für die Störungen eines Kindes unterschiedlicher Natur sein und auf "Fehler im System Individuum - Familie - Gesellschaft und in ihrer Interaktion miteinander" zurückgehen.

Die Erziehung des Kindes ist auf die Entwicklung seiner Persönlichkeit ausgerichtet und stärkt die Achtung der Rechte und der Freiheiten des Kindes. Die gesetzliche Bestimmung erlaubt allerdings den Eltern, bei der Erziehung der Kinder angemessene Bildungsmittel einzusetzen.

Die angemessenen Erziehungsmaßnahmen sind laut dem Gesetz solche, die die Gesundheit, die Würde und die körperliche, geistige und emotionale Entwicklung des Kindes nicht gefährden. Das Gesetz erlaubt, in die Erziehung des Kindes einzugreifen, um die Qualität des erzieherischen Umfelds zu verbessern, auch wenn einer der Ehegatten nicht der biologische Vater des Kindes ist und mit dem Kind und seiner Mutter in einem Haushalt lebt.

Die Familie wird auch durch das Umfeld in der Schule, die das Kind besucht, beeinflusst. Die Zusammenarbeit zwischen den Lehrern und den Eltern des Kindes ist äußerst wichtig, um sowohl im Bereich der Bildung als auch der Erziehung positive Ergebnisse zu erzielen. Besondere Aufmerksamkeit sollte vor allem den Fällen gewidmet werden, in denen es um Kinder mit sonderpädagogischem Förderbedarf im Rahmen eines integrierten Bildungsprozesses geht. Für diese Gruppe von Kindern ist der positive Einfluss sowohl der Familie als auch des sozialen Umfelds wichtig. Die Zahl der Kinder, die aufgrund von körperlichen Behinderungen, Hörbehinderungen, Sehbehinderungen, Kommunikationsstörungen, Verhaltensstörungen, geistigen Behinderungen oder Mehrfachbehinderungen am integrierten Bildungsprozess teilnehmen, ist nicht unbedeutend. Die Integration von Kindern mit sonderpädagogischem Förderbedarf erfordert nicht nur die Zusammenarbeit von Familie und Schule, sondern auch die Teilnahme der Gesellschaft als Ganzes, um geeignete spezifische Bedingungen zu schaffen. Das Zusammenspiel besteht darin, dass die Gesellschaft Bedingungen für die Bildung von Kindern mit Behinderungen schaffen sollte, und das im Rahmen eines natürlichen sozialen Umfelds mit stabilen Klassenkameraden, die sich gegenseitig respektieren und lernen, zu kooperieren und sich gegenseitig zu helfen, um die Bedingungen und Bedürfnisse des Bildungsprozesses zu erfüllen. Fachliche Unterstützung in diesem Bereich bieten auch die sonderpädagogischen Beratungsstellen, die diese Kinder bei der Integration in den Bildungsprozess fachlich begleiten.

Neben der familiären und schulischen Erziehung ist auch die außerschulische Erziehung wichtig, da sie darauf abzielt, ein soziales Leben in einer gleichaltrigen Gruppe zu entwickeln. Dabei handelt es sich sowohl um formelle als auch um informelle Gruppen, die den Kindern helfen, im Rahmen der Selbsterziehung Kommunikation, Kreativität, Talente, Wissen über Lebenswerte und eine gesunde Lebensweise zu entwickeln und so die weitere Entwicklung der Kinder zu fördern. Die Eignung der gewählten Freizeitaktivitäten wird von der Familie selbst und ihrem Le-

bensstil beeinflusst. Eine wichtige Aufgabe der Gesellschaft sollte daher darin bestehen, die Mittel für Freizeitaktivitäten aufzustocken. Dies würde den Zugang zu Aktivitäten für Kinder verbessern, insbesondere für Kinder aus sozial benachteiligten Familien und Verhältnissen, da die Wahl der Freizeitaktivitäten weitgehend von der finanziellen Situation der Familie beeinflusst wird. In diesem Bereich ist ein synergetischer Ansatz für eine vielfältige Gruppe von Kindern, einschließlich Kindern mit Behinderungen oder Kindern aus sozial benachteiligten Verhältnissen, erforderlich. Es ist wichtig, die Aufmerksamkeit auf die Teamarbeit der Kinder in der Gruppe zu richten und nicht explizit die Fähigkeiten des Einzelnen in den Vordergrund zu stellen. Im Bereich der Freizeitgestaltung, insbesondere bei einer heterogenen Gruppe von Kindern, zu der auch Kinder mit Behinderungen oder Kinder aus sozial benachteiligten Verhältnissen gehören, ist es notwendig, auf die Art der gesundheitlichen Benachteiligung sowie auf die Art des familiären Umfelds zu achten, die die Fähigkeiten des Einzelnen beeinflussen. Die Ergebnisse der Teamarbeit können dann den Einzelnen auch dazu anregen, sich aktiver an der Freizeitgestaltung zu beteiligen.

Die Verantwortung für die Kindererziehung wird von beiden Eltern getragen, aber sie kann nicht nur als rechtliche sondern auch als nicht-rechtliche Kategorie verstanden werden, es geht z.B. um moralische Verantwortung, humane Verantwortung, aber auch um wirtschaftliche Verantwortung. Die rechtliche Verantwortung für die Erziehung des Kindes und für inakzeptables Verhalten von Eltern oder Kindern ist mit Sanktionen verbunden, die im Einklang mit der Familiengesetzgebung [Gesetz Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften, Gesetz Nr. 305/2005 GBl. der Slowakei über den sozialrechtlichen Schutz von Kindern und über die Sozialvormundschaft und über die Änderung und Ergänzung mancher Gesetze, in der Fassung späterer Vorschriften] sowie im Rahmen der strafrechtlichen Bestimmungen [Gesetz Nr. 300/2005 des Strafgesetzbuches, in der geänderten Fassung]. umgesetzt werden. Wie bereits erwähnt, kann laut § 30 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften, auch ein Ehepartner, der nicht der genetische Elternteil des Kindes ist, an der Erziehung des Kindes teilnehmen, wenn er im selben Haushalt lebt. Da eheliche, außereheliche oder aus einer früheren Ehe eines der Ehegatten stammende Kinder in einer Familie zusammenleben kön-

nen, bestimmt das Gesetz im Rahmen der Erhaltung der Qualität des Erziehungsumfelds das Recht, in die Erziehung des Kindes einzugreifen auch für den Ehegatten, der nicht der genetische Vater des Kindes ist. Daher hat auch ein Ehemann, der nicht der Vater des Kindes ist, gemäß der vorgenannten Bestimmung das Recht, bei der Erziehung des Kindes geeignete Erziehungsmittel einzusetzen. Diese Erziehungsmaßnahmen dürfen jedoch die Gesundheit, die Würde und die körperliche, geistige und emotionale Entwicklung des Kindes nicht gefährden.

Die Kindererziehung zielt auf die Entwicklung seiner Persönlichkeit ab und bestärkt den Respekt gegenüber die Rechte und Freiheiten des Kindes. Bei der Erfüllung dieser Anforderungen ist die Zusammenarbeit zwischen den Erziehern und den Eltern des Kindes äußerst wichtig, um sowohl im Bereich der Erziehung als auch im Bereich der Bildung positive Ergebnisse zu erzielen. Besondere Aufmerksamkeit sollte vor allem den Fällen gewidmet werden, in denen es um Kinder mit sonderpädagogischem Förderbedarf im Rahmen eines integrierten Bildungsprozesses geht. Für diese Gruppe von Kindern ist der positive Einfluss sowohl der Familie als auch des sozialen Umfelds wichtig. Die Zahl der Kinder, die aufgrund von körperlichen Behinderungen, Hörbehinderungen, Sehbehinderungen, Kommunikationsstörungen, Verhaltensstörungen, geistigen Behinderungen oder Mehrfachbehinderungen am integrierten Bildungsprozess teilnehmen, ist nicht unerheblich. Die Integration von Kindern mit sonderpädagogischem Förderbedarf erfordert nicht nur die Zusammenarbeit von Familie und Schule, sondern auch der ganzen Gesellschaft, um geeignete spezifische Bedingungen zu schaffen. Das Zusammenspiel besteht darin, dass die Gesellschaft die Bedingungen für die Erziehung behinderter Kinder in einem natürlichen sozialen Umfeld mit intakten Klassenkameraden schafft, die sich gegenseitig respektieren und soziale Beziehungen pflegen, so dass sie lernen, zusammenzuarbeiten und sich gegenseitig zu helfen, um die Bedingungen und Bedürfnisse des Bildungsprozesses zu erfüllen. Fachliche Unterstützung in diesem Bereich bieten auch die sonderpädagogischen Beratungsstellen, die diese Kinder bei der Integration in den Bildungsprozess fachlich begleiten.

Eine wichtige Rolle im Prozess der Erziehung und der Bildung der Kinder spielt die außerschulische Bildung, die darauf abzielt, das soziale Leben in einer Gruppe von Gleichaltrigen zu entwickeln und das im Einklang mit der familiären und schulischen Bildung. Dabei handelt es sich um formelle oder informelle Gruppen, die den Kindern helfen,

im Rahmen der Selbsterziehung Kommunikation, Kreativität, Talente, Wissen über die Werte des Lebens sowie eine gesunde Lebensweise zu entwickeln, um so ihre weitere Entwicklung zu fördern. Die Wahl der Freizeitaktivitäten wird auch von der Familie und ihrem Lebensstil beeinflusst. Die Wertorientierung des Kindes wird von dem Wertesystem der Familie des Kindes geprägt, was sich sowohl positiv als auch negativ auf das Kind auswirken kann. Daher sollte eine wichtige Aufgabe der Gesellschaft darin bestehen, mehr Mittel speziell für Freizeitaktivitäten bereitzustellen. Dies würde den Zugang zu Aktivitäten auch für Kinder aus sozial benachteiligten Familien und Verhältnissen verbessern, da die Wahl der Freizeitaktivitäten weitgehend von der finanziellen Situation der Familie beeinflusst wird.

Rechte und Pflichten der Eltern sind im zweiten Teil des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über Änderung und Ergänzung mancher Gesetze in der geänderten Fassung geregelt. Aus dem Titel selbst geht hervor, dass der Inhalt dieses Teils der Rechtsvorschriften die gegenseitigen Rechte und Pflichten von Eltern und Kindern sind. Wie aus den betreffenden Bestimmungen hervorgeht, geht es um Rechte und Pflichten, die sowohl die Eltern gegenüber den Kindern als auch die Kinder gegenüber den Eltern haben. Es handelt sich um persönliche Rechte, die nicht auf andere Personen übertragen werden können.

Rechte und Pflichten der Eltern gemäß § 28 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der geänderten Fassung sind als ständige und konsequente Sorge um die Erziehung, Gesundheit, Ernährung und allseitige Entwicklung des minderjährigen Kindes und seiner Vertretung vor den zuständigen Behörden sowie die Verwaltung des Vermögens des Kindes zum Wohle des Kindes dargestellt. Es handelt sich um subjektive elterliche Rechte, die den beiden Elternteilen zustehen. Die Ausübung dieser Rechte ist auch deshalb wichtig, weil die Eltern für die ordnungsgemäße Erziehung des Kindes gegenüber der Gesellschaft, die ihnen diese Verpflichtung auferlegt, verantwortlich sind. Bei Nichterfüllung dieser Verpflichtung sanktioniert die Gesellschaft die Eltern auch im Rahmen der Strafgesetzgebung [z. B. Gefährdung der sittlichen Erziehung des Kindes, etc.] Wenn die Eltern ihre Rechte nicht ordnungsgemäß wahrnehmen können, bestellt das Gericht einen Vormund für das Kind, der die Rechte des Kindes zu schützen hat. Die Ausübung der Vormundschaft wird regelmäßig vom Gericht überwacht.

Zu den gesetzlichen Pflichten der Eltern gegenüber dem Kind gehört neben der Unterhaltspflicht auch die Vertretung des Kindes. Laut § 31 Absatz 1 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften besteht die Verpflichtung darin, "ein minderjähriges Kind bei Rechtshandlungen, für die es nicht zuständig ist, zu vertreten".

Diese Bestimmung des Gesetzes sieht ausdrücklich eine Ausnahme für den Fall vor, wenn der Elternteil das minderjährige Kind nicht vertreten kann. Ein Elternteil ist von der Vertretung eines Kindes ausgeschlossen, wenn ein Interessenkonflikt zwischen dem Kind und dem Elternteil in einem Verfahren besteht, das die Rechte des Kindes betrifft. In diesem Fall ernennt das Gericht einen Kollisionsvormund, der das minderjährige Kind vertritt und sein Interesse während des Gerichtsverfahrens wahrnimmt. Die Vertretung endet jedoch mit dem Abschluss des Gerichtsverfahrens. Die Vertretung des Kindes ist besonders wichtig, wenn das Kind geistig behindert ist. Im Falle eines minderjährigen Kindes wird das Recht und die Pflicht dem Elternteil durch das Gesetz Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften auferlegt. Nach Erreichen der Volljährigkeit ist es je nach Schwere der Behinderung erforderlich, eine gesetzliche Betreuung für das Kind zu bestellen, wenn es selbst nicht in der Lage ist, seine Rechte zu wahren. Die gesetzliche Betreuung kann sowohl durch die Eltern des Kindes als auch durch eine andere geeignete natürliche Person bestellt werden, die in der Lage und bereit ist, das volljährige Kind zu vertreten. Ist eine solche Person nicht vorhanden, kann das Gericht auch eine juristische Person als Betreuer bestellen. In den meisten Fällen handelt es sich dabei um die Gemeinde oder, im Falle der Heimpflege, um die Einrichtung, in der die Pflege geleistet wird.

Ein wichtiges Recht eines Elternteils besteht darin, seine Zustimmung zu einem bestimmten Rechtsakt in Bezug auf ein minderjähriges Kind zu geben, wie z. B. die Feststellung der Elternschaft, die Zustimmung zur Adoption eines minderjährigen Kindes und eine Stellungnahme im Fall einer Pflegefamilie. Die Artikel §§ 38 bis 43 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften regeln die Bedingungen, unter denen das Recht der Eltern auf Erziehung ihres Kindes eingeschränkt werden kann. Die Bewertung der Qualität der elterlichen Kompetenz ist einer der grundlegenden Ansätze der

Fachleute, bevor sie in die elterlichen Rechte und Pflichten eingreifen. Die Pflege, Erziehung und Ausbildung des Kindes wird einer bestimmten Familie in Übereinstimmung mit den geltenden Rechtsvorschriften anvertraut und das unabhängig davon, ob es sich bei den Eltern um die eigenen Eltern oder um Ersatzeltern handelt. Entscheidend ist, ob das familiäre Umfeld einen positiven Einfluss auf die Erziehung des Kindes hat.

Familiäre Störungen

Wenn die Familie ihre grundlegenden Aufgaben in Bezug auf die Kinderbetreuung nicht erfüllt und ihre Instabilität sich negativ auf die Erziehung des Kindes auswirkt und zu Misstrauen, Konflikten, Kommunikationsmangel und negativen emotionalen Äußerungen in der Familie oder zu Problemen bei der Befriedigung der Grundbedürfnisse der Kinder führt und die Familie Anzeichen einer Problemfamilie oder einer dysfunktionalen oder gestörten Familie aufweist, ist es die Pflicht der Gesellschaft und der von ihr autorisierten Institutionen, einzugreifen, um die Situation zu korrigieren. Es ist nicht wünschenswert, dass ein Kind negative Einstellungen aus einer solchen Familie übernimmt. Bei Handlungen der Eltern, die nicht dem Wohl des Kindes entsprechen, kann das Gericht die Ausübung der elterlichen Rechte durch die Eltern einschränken [§ 38 des Gesetzes Nr. 36/2005 GBl. der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze, in der Fassung späterer Vorschriften].

Die Ursache der Störung in der Familie herauszufinden, ist die Aufgabe der Familiendiagnose. Die Diagnose ist ein Instrument zur Prüfung der psychologischen Reife und der Eignung für bestimmte Aufgaben bei der Person, die einer diagnostischen Untersuchung unterzogen wird. Das Ziel der Diagnose ist es, der Familie zu helfen. Deshalb ist es notwendig, mit Hilfe diagnostischer Methoden, Erkenntnisse über die Ursachen des sozialen Problems zu gewinnen. Zu den Methoden der Familiendiagnose gehören vor allem das diagnostische Gespräch, die Beobachtung, standardisierte Fragebögen, aber auch projektive Techniken und Besuche im familiären Umfeld.

Störungen in der Familie können sich sowohl auf die körperliche als auch auf die geistige Entwicklung des Kindes negativ auswirken z. B. durch elterliche Eingriffe in die Psyche des Kindes. Elterliche Einmischung kann durch übermäßige Anforderungen an das Kind, unangemessene Erziehungspraktiken und unangemessene Belastungen des Kindes im schulischen Umfeld verursacht werden. Probleme können

auch durch die Trennung des Kindes von den Eltern aufgrund einer langfristigen Erkrankung des Kindes verursacht werden. Erziehungsprobleme können sowohl von der biologischen als auch von der psychologischen Entwicklung beeinflusst werden. Daher müssen die Eltern und auch die Gesellschaft darauf achten, dass das Verhalten des Kindes nicht in ein pathologisches Verhalten abgeleitet.

Im Falle eines problematischen Verhaltens des Kindes oder eines negativen erzieherischen Umfelds in der Familie, regelt das geltende Recht die Vorgehensweise der zuständigen Institutionen, um dem Kind die Möglichkeit zu geben, in einem natürlichen familiären Umfeld, d. h. bei seinen biologischen Eltern, aufzuwachsen. Die Mängel werden durch § 37 des Gesetzes Nr. 36/2005 GBl. über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften und durch § 12 des Gesetzes Nr. 305/2005 GBl. der Slowakei über den sozialrechtlichen Schutz von Kindern und über die Sozialvormundschaft und über Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften behoben. Diese Gesetzgebung gibt Raum für die Regelung von Erziehungsmaßnahmen zum Zweck der Sanierung des familiären Umfelds, d.h. zur Veränderung der Qualität des familiären Umfelds. Die Maßnahmen, die in Zusammenarbeit mit den Berufsverbänden durchgeführt werden, zielen darauf ab, das Verhalten des Kindes zu korrigieren. Die Prävention, ob primär, sekundär oder tertiär, spielt daher eine wichtige Rolle. Die Sozialisation des Kindes kann nur dann erfolgreich sein, wenn sie ein gewisses Maß an Qualität aufweist, das den gesellschaftlichen Normen entspricht.

Zur Identifizierung von Risikoverhaltensweisen in der Familie müssen verschiedene Risikofaktoren analysiert werden. Dabei handelt es sich um interne und externe Faktoren, die sich auf Kinder und andere Familienmitglieder auswirken. Wenn die Familie jedoch zu einem Risiko für das Kind wird und durch die erzieherischen Maßnahmen die Defizite nicht behoben werden konnten, muss das Kind aus dem familiären Umfeld herausgenommen und in einer geeigneten Umgebung untergebracht werden, die seine biologische Familie ersetzt. Es handelt sich um eine Form der Ersatzpflegeunterbringung. Ist die Erziehung des Kindes so beeinträchtigt, dass das Kind schwerwiegende Erziehungsprobleme aufweist, die eine Anstaltserziehung erforderlich machen, kann das Gericht eine Heimunterbringung anordnen.

Stationäre Pflege

Die Anstaltserziehung ist der schwerwiegendste Eingriff in die Rechte des Kindes und die Rechte der Eltern. Da das Familienumfeld immer

Vorrang hat, prüft das Gericht vor der Anordnung einer Heimunterbringung gemäß § 54 ff. *Gesetz Nr. 36/2005 GBL der Slowakei über die Familie und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften*, ob alle Mittel und Maßnahmen eingesetzt wurden, die es dem minderjährigen Kind ermöglichen konnten, in seiner biologischen Familie zu bleiben.

Handelt es sich bei dem Kind um ein minderjähriges Kind mit Verhaltensstörungen und ist eine Umerziehung des Kindes erforderlich, so werden in Heimen, Erziehung, Betreuung und Resozialisierung des minderjährigen Kindes angeboten [Matoušek, 1995]. Es ist wichtig, die Ursachen für das pathologische Verhalten des Kindes herauszufinden, um sie zu korrigieren oder zu beseitigen. Sie werden von biologischen Faktoren beeinflusst, die als endogen - intern - oder exogen - extern - bezeichnet werden. Einige Störungen, wie z. B. die mangelnden Leistungen des Kindes, können durch das Desinteresse der Eltern an der Bildung des Kindes, aber auch durch das eigene Desinteresse des Kindes an schulischen Leistungen verursacht werden. Die oben genannte Störung kann mit pädagogischen und sonderpädagogischen Mitteln behandelt werden. Weicht das Verhalten des Kindes jedoch gravierend von der Norm ab, hat das Kind Suchtprobleme oder ist es gesundheitlich benachteiligt, ist ein professionelles Eingreifen erforderlich, z. B. durch einen Psychologen, einen Sonderpädagogen oder einen Sozialarbeiter. Im System der präventiven, erzieherischen und resozialisierenden Betreuung wird die Erschaffung spezialisierter Einrichtungen für die Betreuung von Kindern mit Verhaltensstörungen differenziert und das auch im Hinblick auf die Möglichkeiten der erzieherischen Einflussnahme auf das Kind. Bei dem häufig genutzten Begriff „Reeducation“, d. h. Umerziehung, ist festzustellen, dass der Begriff oft mit der Heimerziehung in Verbindung gebracht wird, die darauf abzielt, unerwünschtes Verhalten des Kindes gegenüber der Gesellschaft zu beseitigen. Der Begriff kann aber auch aus der Sicht der Sonderpädagogik als Zusammenfassung sonderpädagogischer Aktivitäten verstanden werden, die darauf abzielen, unterentwickelte Funktionen zu entwickeln oder beeinträchtigte Funktionen zu verändern [Vašek, Š, 2011]. Daraus kann geschlossen werden, dass die Art der beim Kind auftretender Störungen ein interdisziplinäres Problem sein kann, das auch aus der Perspektive des allgemeinen Interesses angegangen werden muss.

Mit dem abschließenden Schritt, der Entscheidung des Gerichts über die Anordnung der Betreuung, endet die Rolle der zuständigen staat-

lichen Behörden und Selbstverwaltungsorgane wie - sozialer und rechtlicher Schutz der Kinder und Sozialvormundschaft, Gemeinden, Kinder- und Familienzentren und Bildungseinrichtungen nicht, sondern ganz im Gegenteil, beginnt sie erst jetzt richtig. Ziel der von den Kinderschutz- und Sozialbehörden durchgeführten Maßnahmen ist es, eine Situation zu erreichen, in der das Kind wieder mit seinem natürlichen familiären Umfeld vereint ist und alle unerwünschten Einflüsse negativer Art beseitigt wurden. Es ist daher unbestreitbar, dass die Umsetzung der gesetzlichen Maßnahmen zur Sanierung des familiären Umfelds die Zusammenarbeit aller in diesem Bereich tätigen Stellen erfordert.

Laut Matoušek [2005] kommt der Sozialarbeit eine wichtige Rolle zu, insbesondere im Bereich der Prävention. Die Sozialarbeit ist sowohl eine akademische als auch eine praktische Disziplin, deren Ziel es ist, bestimmte Werte zu schützen. Derzeit gibt es nur ein Minimum an Sozialarbeitern im Bildungsbereich und deshalb ist die Zusammenarbeit mit Erziehern und insbesondere mit Sonderpädagogen minimal. Es kann festgestellt werden, dass es an einer aktiven Zusammenarbeit der Sozialarbeiter vor Ort mit der Schule und der Familie mangelt. Der Mangel an aktiver Zusammenarbeit wird auch durch die große Entfernung zwischen dem Sitz der Einrichtung für den sozialen Schutz der Kinder und der sozialen Vormundschaft in der Gemeinde und der Bildungseinrichtung - der Schule beeinflusst. Das Sammeln von Daten über Schulschwänzen sollte nicht die Arbeit eines Sozialarbeiters erfüllen, sondern in erster Linie ist es wichtig herauszufinden, warum Schulschwänzen in einer Familie überhaupt auftritt, um die Ursachen und Folgen zu ermitteln. Angesichts der Pandemie, die nicht nur dazu geführt hat, dass viele Schüler der Schule fernblieben, sondern die auch die Bildung selbst beeinträchtigt hat, ist das Thema umso dringlicher geworden, da trotz der Bemühungen der Pädagogen keine ausreichenden Leistungen erzielt wurden. Der Ausweg aus diesem Problem liegt in der Zusammenarbeit zwischen einzelnen Ressorts.

Diskussion und Schlussfolgerung

In der Entwicklung der Gesellschaft sind Fragen der Kindererziehung und der Bildung vorrangige Themen. Vor dem Hintergrund der gesellschaftlichen Bemühungen werden verschiedene Theorien, Konzepte und Rechtsvorschriften entwickelt, um im Rahmen der Solidarität, der sozialen Gerechtigkeit, der Demokratie und der Eingliederung von Gruppen, die von sozialer Ausgrenzung bedroht sind, eine Beratung und Unterstützung zu gewährleisten, die darauf abzielt, in einem inter-

disziplinären Prozess die Probleme der Bildung, der Ausbildung und der sozialen Unterstützung für Gruppen zu lösen, die nicht in der Lage sind, ihre Situation aus eigener Kraft zu bewältigen. Ein wichtiger Teil der Arbeit mit einer Familie und einem Kind ist daher die Bewertung der Funktionalität der Familie, um Probleme anzugehen. Um die Bedürfnisse der Familie zu ermitteln, muss ein individueller Plan für die Arbeit mit der Familie entwickelt werden, auf dessen Grundlage alle Aufgaben und Maßnahmen überwacht und bewertet werden, um angemessene Bildungsbedingungen für das Kind zu gewährleisten. Die individuelle Planung in diesem Bereich wird auch durch die geltende Gesetzgebung unterstützt. Für die qualitätsvolle Umsetzung des individuellen Familienarbeitsplans ist es notwendig, ein Netz von Beratungsstellen für Einzelpersonen, Paare und Familien mit Kindern einzurichten, die auf der Grundlage der Anwendung der nationalen Standards für die Unterstützung von Familien mit Kindern durch den Einsatz von Expertenteams Beratungsdienste anbieten. Die professionellen Teammitglieder, d.h. Sozialarbeiter, Sonderpädagogen und Psychologen, sollten mit der Familie und dem Kind im Rahmen ihrer Spezifikation zusammenarbeiten und im Zuge der Schlussfolgerungen Lösungsformen vorschlagen. Ziel der Lösungen ist es, in der Familie ein geeignetes Umfeld für die Erziehung und Bildung des Kindes zu schaffen. Die oben genannten qualifizierten Arbeitsplätze sollen im Rahmen der anstehenden Reform der öffentlichen Verwaltung geschaffen werden. Der Erfolg der von uns vorgeschlagenen Lösung hängt von der Zusammenarbeit der betroffenen Ressorts ab, d. h. der Ressorts für Bildung, Arbeit, Soziales und Familie, Gesundheit und Inneres. Aktivitäten zur Unterstützung von Familien mit Kindern, insbesondere von Familien, die aufgrund von finanziellen Problemen, gesundheitlichen Einschränkungen, Erziehungsdefiziten und Bildungsproblemen usw. von sozialer Ausgrenzung gefährdet sind, sollten so bürgernah wie möglich angeboten werden.

LITERATURVERZEICHNIS

1. Auger M. Učitel a problémový žák. Stratégie pro řešení problémů s kázní a učením. Praha: Portál; 2005. ISBN 80-7178-9070
2. Dunovský J. Sociální pediatrie. Vybrané kapitoly. Praha: Grada Publishing; 1999. 284 s. ISBN 80-7169-254-9
3. Dunovský J. Dítě a poruchy rodiny. Praha: Avicenum zdravotnické nakladatelství; 1986. 140 s. 08-040-86
4. Gabura J. Teória rodiny a proces práce s rodinou. 1. vyd. Bratislava: IRIS; 2012. 318 s. ISBN 978-80-89256-95-2

5. Grófová E. Vybrané sociálno-patologické javy v spoločnosti. Občianske združenie Sociálna práca; 2009. 124 s. ISBN 978-809-89185-34-4
6. Harčariková T, Ondičová J. Život osamelých matiek a ich detí s postihnutím. Špeciálnopedagogické vedecké a praxeologické problémy v kontexte transformačných procesov. Prešovská univerzita v Prešove; 2020. ISBN 978-555-2591-4
7. Jedlička R. 2015. Poruchy socializace u dětí a dospívajících. Praha: Grada; 2015. 325 s. ISBN 978-802475-4475
8. Kaleja M. Teórie a praxe etopédie. Ostrava: Ostravská univerzita; 2013. 97 s. ISBN 978-80-7464-419 -1
9. Kasanová A. Sprievodca sociálneho pracovníka I. Rodina a deti. Nitra :UKF v Nitre; 2008. 307 s. ISBN 178-80-8094-277-9
10. Matoušek O. 1995. Ústavní péče. Praha: Sociologické nakladatelství; 1995. ISBN 80-85850- 08-7
11. Nagyová K, Harčariková T. Siblings of children with oncological illness [electronic document]. AD ALTA [electronic document]. 2019; 9(2):220-226. ISSN (print) 1804-7890
12. Nagyová K, Harčariková T. Problems of families with a child with an incurable disease in the context of special education In: CBU International Conference Proceedings 2016: Innovations in science and education. Vol. 4. Praha: Central Bohemia University; 2016. s. 676-682. ISBN 978-80-88042-05-1 [Innovations in science and education : International Conference. Praha, 23.-25.3.2016]
13. Smetanová D. Participácia sociálnej pedagogiky pri problémovom správaní detí a mládeže v školskom prostredí. In: Poruchy správania ako sociálny a edukačný problém. Bratislava: Iris; 2012. ISBN 978-80-89238-69-9
14. Tokárová A. Et al. Sociálna práca. Filozofická fakulta Prešovskej univerzity v Prešove;;2007. 573 s. ISBN 978-80969419-8-8
15. Vančová A, Kečkéšová M, Smetanová D. Ochrana práv dieťaťa a rodiny v Slovenskej republike rámcovaná platnou legislatívou. Bratislava: Slovak education publishing; 2017. 217 s. ISBN 978-8089834-03-7
16. Vančová A, Kečkéšová M. Legislatívne a inštitucionálne aspekty pomoci osobám so zdravotným znevýhodnením. Užhorod: RIK-U; 2017. 242 s. ISBN 978-617-7404-74-2
17. Vančová A, Kečkéšová M. Sociálna politika- a právo ako prostriedok ochrany osôb so zdravotným znevýhodnením v SR =Social policy – an law as a means of protection of persons with disabilities in Slovakia. 1 vyd. Magdaburg: Europäische Bildungswerke Für Beruf und Gesellschaft e. V.; 2019. 265 s. ISBN 978-3-00-064649-2
18. Groma M, Biščo Kastelová A, Vančová A. Kariérové poradenstvo a pedeutológia v podmienkach inkluzívneho vzdelávania. 1. vyd. Bratislava: Iris; 2016. 126 s.
19. Vančová A, Biščo Kastelová A. The current research view on the issue of special educational diagnostics, special educational counselling and early in-

- tervention for children with disabilities in Slovakia. INTE 2016: Proceedings book, Vol. 4 [elektronický zdroj]. Vol. 4 (2016), s. 604-613 online]. ISSN 2146-7358 [INTE 2016: International Conference on New Horizons in Education. 4th, Vienna, 13.-15.7.2016]
20. Vašek Š. Základy špeciálnej pedagogiky. Vydavateľstvo: Sapiaentia; 2011. 228 s. ISBN 978-80- 89229- 21-5
 21. Žolnová J, Kečkéšová M. Prevýchova v teoretických koncepciách pedagogiky psychosociálne narušených a legislatíve Verfassung der Slowakischen Republik, Gesetz Nr. 460/1992 in der Fassung späterer Vorschriften - Ústava Slovenskej republiky zákon č. 460/1992 Zb. v znení neskorších predpisov
 22. Familiengesetz Nr. 36/2005 GBl. der Slowakischen Republik und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften - Zákon č. 36/2005 Z. z. o rodine a o zmene a doplnení niektorých zákonov v znení neskorších predpisov
 23. Gesetz Nr. 305/2005 GBl. der Slowakischen Republik über den sozialrechtlichen Schutz von Kindern und die soziale Vormundschaft und über die Änderung und Ergänzung mancher Gesetze in der Fassung späterer Vorschriften - Zákon č. 305/2005 Z. z. o sociálnoprávnej ochrane detí a o sociálnej kuratele a o zmene a doplnení niektorých zákonov v znení neskorších predpisov



EDUCATION OF PUPILS WITH INCURABLE ILLNESS IN SLOVAKIA – PARTIAL RESULTS OF QUALITATIVE RESEARCH

Kristína Tkáčová

Abstract. The aim of the paper is to present partial results of research on the education of individuals with incurable diseases, which aimed to find out how a particular type of incurable disease is reflected in the educational area of adolescent life with a particular incurable disease. In the article, we focused on the educational area and on the description of the selected category of meaning, which arose based on phenomenological analysis. The main research sample was adolescents with incurable illnesses and the main research method was phenomenological interview. The results point to the fact that the opportunity to attend school helps students with incurable diseases to feel fuller.

Keywords: education, incurable illness, specific of education.

Special pedagogical aspect is a key area for us in defining and understanding the nature of an incurable disease, which concerns the limitations in the process of education and the need for modification and, in addition, the reduction of the curriculum. It often happens that a child or a pupil with an illness finds himself on the link between the school and the health care system, while in the case of more serious diagnoses, the school needs of the child or the pupil may be overlooked in the health care system. In this case, it is essential that the child is given adequate educational care through various techniques, which may include expressive techniques. An example is bibliotherapy used as early as the 6th century, when nurses read secular books for the sick and dying [2]. Blažek and Olmrová [2] also say that a sick, dying person who is expected to be near death is grateful for every full-fledged experience.

According to the Journal of the Ministry of Health of the Slovak Republic from 2006 [7], it is also emphasized in the tasks of palliative care that individuals be provided with a support system to ensure an active life until death. It also talks about the role of a special pedagogue in the staffing of mobile hospices and institutional hospices. For this reason, we see a great need for a specific definition of the roles and responsibilities of a special pedagogue in working with terminally ill children, pupils, and adults in the terminal state of the disease, as well as in the gradual progression of the disease.

Education of individuals with the disease can currently take several forms, among which we can include individual integration, where the

individual is educated according to an individual educational program in a regular elementary school, education in a regular school taking into account the specifics of the disease without an individual educational program, school education for students with physical disabilities (muscular dystrophy), education at school at the medical facility, resp. directly at the hospital department and education in the home environment under the guidance of a parent or teacher. According to the inclusion in one of the mentioned forms, specific conditions are created for the education of these individuals, while it is important that the treatment regimen is fully observed and that the educational needs of everyone are fully met [1].

There are many definitions of the term education, some of which differ significantly. Kratochvílová [8] perceives education as upbringing and education and emphasizes that the term education represents only equivalent foreign language terms. She also understands education as education in the broadest sense and points out that in practice this term is translated exclusively as education. Hartl and Hartlová [6, 687] in [11] also describe the definition of education, which they describe as “learning-based transfer of human experience, behaviour, and value systems”. This definition is based on the historical context of education that humanity has created in its work.

Education can also be broadly divided into two basic approaches, namely education in a narrower sense, which is “systematically planned teaching, carried out in an institution” and education in a broader understanding, including a “lifelong process of acquiring new knowledge, skills, and competence through the formal and informal exposure of information, ideas and experiences” [14; 18].

For all professionals dealing with children with incurable diseases – doctors, teachers and specialists in various fields, the principle applies that these children are constantly evolving, interested in various activities, even if their future is limited in time [12]. This implies that children and pupils with incurable diseases of any length of time also deserve to be perceived as full-fledged people who have, among other things, educational needs. And it is precisely these educational needs that are to be met to such an extent and in such a form that correspond to the needs, interests and developmental level of the child, resp. pupils.

School Act of the Slovak Republic no. 245/2008 guarantees equal access to education for the child and the student, resp. who is disabled in health care, who is in a medical facility due to his / her health condition.

This is stipulated in the tenth part of §144 of the Act of the Ministry of Education of the Slovak Republic on upbringing and education (School Act) no. 245/2008 [1, 96-97], which states that every child has the right to:

- “equal access to education,
- individual approach respecting his abilities and possibilities, talent, and state of health to the extent provided by this Act,
- the organization of education and training appropriate to his age, abilities, interests, state of health and in accordance with the principles of psychohygiene,
- for individual education under the conditions established by this Act pursuant to Section 24”.

The education of children and pupils with the disease is recommended to be based on humanistic education and to apply it in accordance with international documents – the Convention on the Rights of the Child, the European Charter for the Education of Sick Children and Adolescents and the Charter of the Rights of Hospitalized Children [15], these documents are committed to respecting and ensuring the right of every child to education, whether in a hospital or home environment, to the development of each child with regard to their abilities and abilities, goals of continuous educating these children and pupils to ensure that the role of pupils is maintained, etc. [3; 4].

As Harčaričková [5] says, the specificity of educating individuals with illness or impairment lies not only in the adjustment of the curriculum, but especially in the implementation of specific conditions (external and internal) education that result from the diversity of diseases, hospital regimes, medical and other facilities.

The specifics of education for individuals with the disease are also paid attention to in the educational program for sick and disabled students [9], where it is said that:

- education of pupils with the disease has a markedly individual form and takes place in special areas of the primary school at the medical facility or in bed,
- specific means, forms and methods of work are used in the process of education, and these are subject to the health regime as well as the health status of the student,
- education is based on a dynamic interaction between the specialist, the teacher, the pupil, the parent, and the medical staff,
- in connection with the education of students with illness and impairment, it is possible to include block teaching in the educational process.

We can also include among the specifics of education of individuals with the disease variants of framework curriculum [9; 13], which are divided as follows:

| VARIANT OF THE FRAMEWORK CURRICULUM | TIME ALLOWANCE | REPRESENTATION OF EDUCATIONAL AREAS |
|--|-----------------------|---|
| A variant | 5 hours per week | Language and communication; Mathematics and working with information |
| B variant | 10 hours per week | Language and communication; Mathematics and information work; Human and nature; Human and society |
| C variant | 15 hours per week | Language and communication; Mathematics and information work; Human and nature; Human and society; Art and culture |
| D variant | 20 hours per week | Language and communication; Mathematics and information work; Human and nature; Human and society; Art and culture; Health and exercise |

Tab. 1: Variants of the framework curriculum for sick and disabled students for primary and lower secondary education [9; 13]

The issue of individuals with illness is an integral part of the scientific field of pedagogy of the physically handicapped, sick, and debilitated, which integrates three groups of individuals – they are individuals with disability, illness, and disability. In the context of our work, we focus in its entirety on the issue of individuals with the disease, especially those whose lives are severely limited by the progression of their disease. The pedagogy of sick and debilitated children is currently an area in Slovakia as well as abroad, which is still underdeveloped, but in recent years more attention has begun to pay attention to it, not only in terms of education but also in terms of education through various institutions and the organization. Socialization of these individuals in the specific environment of hospitals and the specific state of convalescence, as well as the position of a special pedagogue and a helping profession in the educational process of these children. The role of special pedagogue has begun to assert itself as an important member of the transdisciplinary team of palliative and hospice care, but the work mission, tasks, and

specifics of working with children, pupils and adolescents with incurable diseases are still not precisely defined.

As part of the paper, we would like to present partial results of research that focused on individuals with incurable diseases. The main goal of the research was to describe the educational process of individuals with selected types of incurable diseases - oncological diseases, cystic fibrosis, Duchenne muscular dystrophy, to find out what it is like, from the point of view of individuals with incurable disease.

We have chosen a qualitative approach for the needs of our research, and we have proceeded based on the principles of the phenomenological approach, as it best meets the needs of our work.

In our work, we focused on a group of five adolescents with selected types of incurable diseases – cancer, cystic fibrosis, Duchenne muscular dystrophy and their parents.

When designing our research sample, we focused on individuals who were diagnosed with incurable, respectively. life threatening disease. We focused on adolescents whose health condition allowed them to participate in the research in the form of interviews and their ability to communicate about the issue. Equally important selection aspect was the willingness of the parent, respectively parents, legal guardians to participate in the research in the form of a semi-structured interview. Participants (adolescents) are marked by code p1-p5, and parents with P1-P5.

The selection of a sample of individuals with incurable diseases was conditioned by a deliberate and equally available choice, as in Slovakia there is no required record of statistical data on the number of individuals of a specific age for selected incurable diseases.

The research was carried out from March 2017 to January 2018. With the request to participate, we primarily contacted familiar families, which include an individual with an incurable disease. Due to the specific research sample, we did not ask the families to address the families again, as the initial contact with the family was an important aspect and principle of work for us.

Based on a phenomenological analysis of transcripts of interviews with adolescents with selected types of incurable diseases, we identified four meaning categories in the group of adolescents that were supported by subtopics. In addition to these meaning categories, another meaning category has been created in the group of adolescents with an incurable disease, which, however, is made up of the statements of only a few

participants but deserves attention. For the range of results, we decided to state the meaning category that was directly related to education, it is the meaning category of the specifics of education, with the subtopics that we list in the following table:

| Meaning category | Specifics of education |
|------------------|--|
| Subtopics | Individual forms of education Orientation and interests in individual topics Additional education Education during treatment Motive for education - the importance of school for the future Specifics and limitations of education resulting from diagnosis |

Tab. 2: Important category Specifics of education and its subtopics [10; 16; 17]

Specifics of education

The meaning category of the specifics of education was created based on the testimonies of adolescents with selected types of incurable diseases. The experiences of individual adolescents are unique, and it is equally unique to understand their experiences from our perspective.

In this category, we have identified several sub-topics that support the main meaning category, and we would like to address each sub-topic individually with respect to each participant within the group of adolescents.

Education during treatment

For each participant in the group of adolescents with incurable disease, we met with hospitalization, respectively. with such a medical condition, which required a stay in a hospital, home environment, resp. another medical facility.

Adolescents with incurable disease continued their studies, learning even during deteriorating health. In the study of one case, we encountered the fact that in the case of high school students, teachers in individual health facilities do not pay attention to this group of students and all educational responsibility remains with them, respectively. with the help of a parent:

“No, because the teachers did less, I was in high school (p1)”.

As we have already mentioned, self-study prevails among these students:

“Yes, I read that I enjoy agriculture and breeding, and the chemistry is interesting (p1)”.

For some adolescents, a form of home education was also used. We can also support these statements with the statements of parents:

“... that’s how the week was at home. He can’t get dressed properly from anyone. Grandma didn’t rule. So, we studied with him at home that week. He was allowed home learning ... (P1)”

Equally important are the various medical facilities that pupils, students with incurable diseases can visit during treatment, and as part of comprehensive care, they are also provided with educational care. These are schools near medical facilities - hospitals and spas, which our participants visited.

Individual forms and adjustments of education

This sub-theme is linked to the individual experience of individual adolescents with an incurable disease regarding adjustments in the educational process, which includes an individual educational program as well as an individual study plan.

All adolescents, except one, are educated according to individual programs and plans, while we have also identified the individual form and adjustment of education in an adolescent who does not yet need this adjustment, in the form of a program, plan. For two participants, we relied on the statements of parents, as we were not able to directly identify this subtopic in the statements of adolescents:

“Hey, exactly. I was there too, we also agreed on an individual study plan, but in any case, I would have to attend some lectures twice a week and now that the leg doesn’t listen to me, it would be difficult (p1)”

“Hey, they give (p2)”

“Uhm, so he actually went to school, was actually integrated into the kindergarten, and then they actually integrated it into the primary among normal, healthy children”. ... “There was no problem. He just specifically adjusted his educational program (P1)”

“Yes, he has a physical one, but he doesn’t have anyone there to train with him like here. But he practices everything that the nurses show him here (P2)”

Motive for education – the importance of school for the future

In the literature, we may encounter the view that individuals with incurable diseases, especially adolescents, may, in the event of disease progression and in the event of insufficient psychological and supportive care, begin to focus exclusively on their own diagnosis and may begin to lose their motives for life.

We did not encounter this phenomenon in the participants of our research, which is presented by the following statements:

“I want to achieve something, finish high school and then probably have some farm (p1)”.

“So that I have a high school diploma and that I can achieve something in life; ... without school I wouldn’t have achieved much (p3)”.

“To learn everything, I need for life ...; ... Then I would either like to do something with computers (p2)”.

“Well, so I have some education (p4)”.

“Well, I have to go there, but sometimes I don’t want to. But I must learn not to be stupid. I must.; To be nine. Because when I fell, I should have been nine. Because I was still falling, so I’m eight again. Never mind (p5)”.

From these statements, each of the participants in the group of adolescents has a motive for learning, which is obviously about the future. Here we encounter the problem that the main diagnosis determines the future of these individuals, which is precisely due to the diagnosis, limited. As part of communication with the parents of these individuals, communication with the individuals themselves with an incurable disease, we found that all participants are aware of the nature of their disease, but the topic of the future is not communicated in the family.

Orientation and interests in individual topics

This sub-theme is made up of testimonials from a group of adolescents about favourite subjects and activities that adolescents focused on, even if they didn’t have to.

“Yes, I read, I enjoy agriculture and breeding, and the chemistry in this is interesting (p1)”.

“I’ll be honest, I don’t like to learn, but I’ll be happy to learn what I’m interested in (p2)”.

“Um, again, the geography, when it’s so interesting, it’s probably ... even the physics, when there are sometimes such interesting topics that are there (p3)”.

“As good as the economy is, it’s cool, it’s so interesting; Well, when it’s something interesting, I enjoy it ...; ... although maybe I paint (p4)”.

“I like it at school, I probably like the math the most (p5)”.

It is important to mention that for individuals with incurable diseases, especially those whose lives are in the final stages of the disease, it is appropriate to focus educational activities on those subjects and areas that individuals are interested in.

Specifics and limitations of education resulting from diagnosis

Within this sub-theme, it is important to draw attention to the fact that training during treatment is possible and effective at the same time when the individual is experienced by the person familiar with the diagnosis, symptomatology and specifics resulting from a particular diagnosis and when the individual does not bother disease symptoms and treatment-related symptoms.

In connection with this subtopic, we consider it important to draw attention to the fact that within our research group of adolescents, we also focused on individuals with muscular dystrophy of the Duchenne type, which diagnoses. These relate to the intellectual level, in the field of verbal intelligence and learning disabilities, in particular dyslexia, dysgraphia and dysorthography. We also identified these difficulties in the participants' statements:

“Probably learning ...; Probably to make it easier, the teaching (p3)”.

“Reading sometimes works well for me and sometimes bad, because I have to speak slowly and I have to repeat it sometimes; Well, she reads it to me and so, because I still cough and sometimes, I'm confused about what is what (p5)”.

In addition to the following specific diagnoses (DMDs), specifics and limitations have occurred in other adolescents with incurable diseases:

“It simply came to our notice then. She didn't come to me. It was hard for me to learn. And most importantly, if you don't have it explained, you don't know. You will learn words, but those times and so on, that's different (p1)”.

“As I was learning in school, the way I am at home, I didn't even want it just, I have a headache, I was tired; ... as long as I wrote it, it would also be the end of the hour (p4)”.

In addition to the statements of adolescents, we also rely on the statements of the parents of one adolescent, as we were not able to directly identify this subtopic in the statements of adolescents:

“He can't play sports, or something like that, because he suffocates right away; He gets tired very quickly (P2)”.

As can be seen in the individual statements, the diagnosis significantly affects the process of education, whether it is a change in the perception of difficulty or concerns the insufficient acquisition of the curriculum due to insufficient explanation.

Additional education

The sub-theme of further education is formed by the statements of

adolescents related to further education, education at higher levels of study - secondary and higher education. As we have already indicated in the subtopic motive for education, the future of these adolescents with an incurable disease is not and, in some cases, not even communicated, which is also reflected in the following statements:

“Overall, I like school. But like most people, when they don’t have to, they don’t learn. But I’m looking forward to college (p1)”.

*“Then I would either like to ... do something with computers; Hmmm, the fact that we would still stay together in high school, even in college (p3)
“*

“What, I’ll catch up (p4)”.

“Computers, then. But on previous school, they said that I could not, because of this and that (p5)”.

“... so, he will be able to go to university in Komárno. But now we are trying to persuade him to try it, but he still has one year ahead of him (p2; P2)”.

All participants plan to continue their studies, even though they are aware of the nature of their illness. In this regard, we can proceed from two recommendations. The first concerns the communication of the disease as well as the prognosis in the family, resp. with another loved one. The second is about keeping these teens motivated, but within the truth.

In addition to the identified subtopics that support the specific category of specifics of education, we encountered several significant statements in the analysis, which, however, could not be identified as subtopics or as meaning categories. However, we decided to pay attention to them in this final part of the individual meaning categories.

The first area is the proposed changes by adolescents with incurable diseases. In the first case, these are changes concerning the organization and content of education:

“I would change that I would remove unnecessary objects and I would rather focus on those objects that can help young people in life. I would shorten the teaching so that we do not have to sit in school for 8 hours (p2)”.

This proposal mainly concerns mainstream secondary education without specific modifications, so we cannot consider this proposal to be binding for adolescents with incurable diseases, but we can rely on it for intact adolescents when designing the content and organization of education.

The second area concerns the *social role of the student*. In one of our research participants, we encountered repeated statements during the analysis, which assured the adolescent that she was still a student, despite the progression of the disease and ill health:

"I'm home so far; How I go to school, but only now I'm home, a month ...; As I was learning at school, as at home, I didn't even want it, I just had a headache, I was tired ... (p4)".

From these statements, it is evident that this teenager lacked the assurance that, despite the progressive progression and ill health, she still has the role of a student, even though she is at home. We must point out that we have encountered this phenomenon in practice with other adolescents in palliative care. We consider it important to point out that for adolescents in the last stages of the disease, the topic of social roles is very close, and they often need reassurance, even without asking, that their social roles are changing but not disappearing because of the disease.

The specific category of specifics of education represents the experience of individual adolescents with selected types of incurable diseases with education after the diagnosis of incurable disease, during treatment and in some adolescents already in home palliative care. In this category, the results show that the process of education during treatment is hampered not only by health complications and adverse consequences of treatment, but especially by high school students is affected by the need for independence without the direct help of professionals, which we mean special educators. hospital wards.

An essential part of educating these adolescents is a highly individualized approach, which should be considered not only in the teaching process, but also during breaks and homework assignments, as due to illness and disease progression in our research participants performing tasks as well as during individual tasks.

Education, according to several professional sources, is an important part of the life of terminally ill adolescents, because despite awareness of their own health and the progressive progression of the disease, these individuals have a strong motive to continue their studies because further education is also a sub-theme, and this motive is, we assume, a strong coping factor.

Regarding the specifics of education, it is necessary to state that the adolescents of our research have identified precise areas of interest,

which they like to pursue despite their unfavourable health condition. It follows from the above that for individuals with incurable diseases, we should rely on individual interests and topics that these individuals show interest in, and then use links with these topics in further education.

References

1. Act no. 245/2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov v súčasnom znení [online]. Available from: <https://www.minedu.sk/data/att/9287.pdf>
2. Blažek B, Olmrová J. Krása a bolest. Praha: Panorama; 1985.
3. Convention on the Rights of the Child [online]. Available from: https://www.unicef.sk/dokumenty/materialy-na-stiahnutie/advocacy/dohovor_o_pravach_dietata.pdf
4. EACH. EACH Charter with Annotations [online]. Available from: https://docs.google.com/viewer?url=https%3A%2F%2Fwww.each-for-sick-children.org%2Fimages%2Fstories%2F2016%2FCharter_AUG2016_oSz.pdf
5. Harčáriková T. Pedagogika telesne postihnutých, chorých a zdravotne oslabených – teoretické základy. Bratislava: IRIS; 2011.
6. Hartl P, Hartlová H. Psychologický slovník. Praha: Portál; 1993.
7. Journal of the Ministry of Health of the Slovak Republic [online]. Available from: http://www.health.gov.sk/Zdroje?/Sources/dokumenty/vestniky_mz_sr/2007/vestnik-2006-08-31.pdf
8. Kratochvílová E. et al. Úvod do pedagogiky. Trnava: Pedagogická fakulta Trnavskej univerzity v Trnave; 2007.
9. Lechta V, Domancová I, Vladová K. Aplikácia vzdelávacích programov pre žiakov so zdravotným znevýhodnením a žiakov so všeobecným intelektovým nadaním [online]. 2016. Available from: http://old.statpedu.sk/sites/default/files/nove_dokumenty/deti-a-ziaci-so-zdravotnym-znevychodnenim/Aplikacia_VPpre_ZZ_VIN_2016.pdf
10. Nagyová K. Jednotlivec s nevyliciteľnou chorobou v kontexte pedagogiky chorých. Dizertačná práca. Bratislava: PdF; 2018.
11. Nagyová K. Jednotlivec s onkologickým ochorením v kontexte pedagogiky chorých: diplomová práca. Bratislava: PdF; 2015.
12. Renotíerová M. Somatopedické minimum. Olomouc: Univerzita Palackého v Olomouci; 2003.
13. ŠPÚ. Vzdelávací program pre žiakov chorých a zdravotne oslabených pre primárne vzdelávanie a nižšie stredné vzdelávanie [online]. 2016. Available from: [165](http://www.statpedu.sk/files/sk/deti-ziaci-so-svvp/deti-ziaci-so-zdravotnym-znevychodnenim-vseobecny-intelektovym-nadanim/vzdelavacie-programy/vzdelavacie-programy-ziakov-so-zdravotnym-znevychodnenim-vseobecny-intelektovym-nadanim/zakladne-vzdelavanie-pri-</div><div data-bbox=)

- marne-vzdelavanie-nizsie-stredne-vzdelavanie/vp-ziakov-chorych-zdravotne-oslabenych-2.pdf
14. Vančová A. Základy pedagogiky mentálne postihnutých. Bratislava: Sapiencia; 2005.
 15. Vladová K et al. Vzdelávací program pre žiakov chorých a zdravotne oslabených- ISCED 1-2- predprimárne vzdelávanie [online]. 2009. Available from: http://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/vp_chazo_isced_1_2.pdf
 16. Nagyová K, Harčaríková T. Siblings of children with oncological illness [elektronický dokument]In: AD ALTA [elektronický dokument]. 2019: 9(2):220-226. ISSN (print) 1804-7890
 17. Nagyová K, Harčaríková T. Problems of families with a child with an incurable disease in the context of special education. CBU International Conference Proceedings 2016: Innovations in science and education. Vol. 4. Praha: Central Bohemia University; 2016. p. 676-682. ISBN 978-80-88042-05-1 [Innovations in science and education : International Conference. Praha, 23.-25.3.2016]
 18. Vančová A. Inovácie v teórii, metodológii a praxeológii pedagogiky mentálne postihnutých. 1. vyd. Ostrava: Ostravská univerzita, Pedagogická fakulta; 2014. 200 p.



AWARENESS OF THE LE BON DÉPART – GOOD START METHOD AND ITS APPLICATION IN COUNSELLING FACILITIES IN THE SLOVAKIA

Kristína Tkáčová, Alica Vančová

Abstract. This article is focused on mapping counselling facilities using the Good Start Method as a possibility to develop graphomotor skills in pupils with mental disabilities in Slovakia. The research part is focused on mapping counselling facilities using the Good Start Method as a possibility to develop a graphomotor skills in individuals with mental disabilities and the summarise the results of the questionnaire replies. The article briefly characterizes graphomotor skills, Good Start Method and describe data collection from 11/2020 to 02/2021. The aim of this survey was to find out at what level and in what representation the method is used in counselling facilities in child with mental disabilities. The research sample was made by 110 workers in facility centres. We use electronic questionnaire. The results of our research showed that 89.1% of respondents do not have information and therefore do not even know the mentioned method. Only 10.9% of respondents answered that they know the Good Start Method.

Keywords: graphomotor skills, individual with mental disabilities, Good Start Method, counselling facilities

Quite often, parents notice that their child has great difficulty holding a pencil and pen shortly before starting their own school. Most of them can't understand why a child doesn't draw them like other children, they don't even hold a pencil and pen as they should. Such facts clearly indicate that the coordination of the child's hands is less developed than it should be, as is the case with most children of their age. Such a child does not want to, he does not dare to hold in his hand's stationery, he does not like to draw, it is even very difficult for him to unzip his clothes, tie a knot or a bow, fasten a zipper.

Uváčková, Valachová and Droppová [13] describe graphomotor skills as the development of motor activities that are essential in writing. Graphomotor as well as writing are part of human literacy. Literacy is a certain individual ability, which means the ability of an individual to write and read. The child acquires the basics of graphomotor skills already during pre-school education.

We can state that graphomotor skills is an interplay of the basic functions of the brain and motor skills, hand-eye coordination, perception,

attention, and physical development of the child. That is why it is appropriate for a child to exercise, train his hand, but at the same time it is necessary to let him move and play naturally, because if a child develops gross motor skills from an early age, the fine one will very likely develop as well.

Coordination of the so-called gentle hand movement allows you to master the dexterity of writing. This skill cannot be acquired in the short time after birth, since to regulate function, it is necessary to isolate the relevant nerve fibres around the bone marrow. This maturation process takes place during the first 5-8 years of the child's life. Movement coordination writing is a special version of gentle movement that guides the description by accurately detecting small lines, their combinations, and eye and hand coordination. Appropriate development of writing coordination is a prerequisite for effective writing instruction. For many children, just mastering the script is one of the sources of failure after starting school. This problem is caused by a lack of movement coordination [7].

Thorne [12] writes that if problems with graphomotor activities occur, it can be dyspraxia, which often means a reduced ability to perform more complex tasks and clumsiness of visuomotor activity.

It is a fact that children's graphic expression is associated with the joy of hand movements on paper. It goes without saying that children like to draw on various materials from an early age. The first scribbles of the child take place without any plan. However, spontaneous scribbling is followed by deliberate drawing efforts. The movements of the hand soften over time and gradually begin to be controlled by the senses. As the child gets older, his graphic shapes and lines are becoming better, and hand movements when drawing are relaxed. Thus, the child learns to control the movements of the hand, which is necessary for him to be able to realize his own graphic ideas. The development of graphomotor skills is individual for each child, and it is determined by the physiological procedure. Of course, certain specific deviations may be present in terms of slower or faster graphomotor development. Children of a certain age show approximately the same characters in drawing and writing. The following table 1 summarizes the graphomotor development of the child according to Loose et al. [6]:

| The age of the child | Level of graphomotor development |
|----------------------|--|
| 2-4 month | – random grip |
| 4-6 month | – palm grip |
| 11-13 month | – fine tweezers grip |
| 16-18 month | – first experience with a pencil - rather random |
| 18-24 month | – coordinated movements – a sheet of paper can be structured – it is possible to eat with a spoon – inward transverse grip – motion control starts (stop - new start) |
| 2-3 year | – hand movements when drawing is smoother and more coordinated – the forms are more diverse (first rather angular, later rounder) – the child flips through the pages of the book – the period of intensive scribbling begins |
| 3-4,5 year | – the beginning of regular, continuous drawing movements – shape variations improve – the grip is transversely with the index finger extended – the child can draw lines – can make movements oriented in a certain direction, thus creating different oriented shapes – changes are possible – corrections and lines are more differentiated – the child can fold the paper – holds a pencil in his fingers – the child draws circles (first open - then closed) – can paint a circle |
| 4,5-5 year | – a meaningful drawing of a "tadpole" representing a stick figure |
| | – the child can draw a cross – connects two times with a line – from the age of 5 can consciously change when we move with a pencil – the diversity of forms is increasing – graphic forms are arranged in such a way that they make sense – can grip the brush – continuous, regular movements are possible |
| 5-7 year | – the child draws with a correctly grasped pencil – the shape has about ten details – can draw and paint large characters independently – continuous and backward movements are possible |
| 6-7 year | – can write and draw in lines – the font and drawings are reduced in size |
| 7-8 year | – the font is smoother and more continuous |
| from 7 years | – the font takes on an individual form |

Tab. 1 Graphomotor development of a child [6]

According to Opatřilová [8], the most important movements in writing and drawing are those based on the movements of large joints and gross motor skills. In such a case, if individuals with mental disabilities have a reduced ability to coordinate movements, the development of gross motor skills is extremely difficult. For these individuals, it is necessary to proceed from the observation of the individual in various activities, such as when playing, running, walking, climbing, jumping, jumping, climbing, etc. It is very important how these children can maintain their balance during various physical activities. Individuals who have a mild degree of mental disability represent a wide range of motor levels, as it is not enough to consider only the species, but the degree of their mental disability is also very important.

Individuals with a socially disadvantaged environment who have been diagnosed with a mental disability may not have motor disorders at all. However, in the case of individuals with a mental disability from birth, we can monitor motor disorders at various levels. At the same time, the whole process of motor development is in most cases influenced by weakened emotions and the will of the individual's personality, who are not interested in any activity [1].

It is remarkable that although the drawing as well as the graphic expression of an individual with a mental disability are mostly simple, they are mostly harmonious. A general characteristic for them is that the image is usually placed at the bottom of the paper, the graphic handwriting is poor, and the features are simplified. Furthermore, tilting and transparency is typical. When equipping new graphic elements, it is always necessary to respect the possibilities and current skills of the individual, which are not in any case the same as the possibilities and skills of their peers, who have no disability [14; 18; 19]. As for the individual developmental stages of drawing, we must speak of a considerable prolongation, while some stages of an individual with a mental disability may not reach at all due to the degree of their disability [4].

In general, we must state that the development of motor skills in individuals with mental disabilities, if we consider all its components – fine, gross motor skills, coordination of movements, visuomotor, sensorimotor, graphomotor, oromotor, is always delayed, in severe cases equally limited [2; 16; 17].

The basis for selecting the optimal option for the development of graphomotor is diagnostics, which is primarily focused on the peculiarities of the individual, which are based on the disability. When examining

graphomotor skills, we should monitor the movements of the hand, fingers when gripping, holding the writing instrument and manipulating it. It is very important to find out the laterality, i.e., the inclination after scribbling and drawing, the ability to imitate the prescribed patterns, the content of the drawing, the filling of the paper area when drawing [10].

In her professional work, Svobodová [11] concisely describes the most important facts to be observed when evaluating the assumptions of graphomotor activity:

- Position in graphomotor activity: popular and spontaneous position
 - correct sitting, specific positions.
- The student's experience with graphomotor activity: with which graphic materials the individual has experience.
- Grip, hand dominance and set of hands: palm, key, cigarette, finger grip.
- Disability features: e.g., hypotension, dyskinesia, and spasticity.
- Other characters, such as accuracy of hand movements and ability of targeted movement; range, strength, dynamics, and speed of hand movement; the ability to mimic movement; rhythmic movement when writing; hand movement automation and movement memory; occurrence of stereotypes and automatisms.

During the development of graphomotor skills it is necessary to respect the individual needs of the individual. When choosing the optimal procedures, we must rely primarily on the results we have obtained through diagnostics. Of course, all exercises must adapt to the age, mental level, and abilities of the individual, but during the development of graphomotor skills we can change them at any time [14].

Zelinková [15] states in her professional literature that the Le Bon Départ Method (Good Start Method) was developed by the French physiotherapist, Théa Budgetov, in the years 1945-1950. This method was originally used in the reduction of motor problems, specifically in left-handers, in children with undefeated laterality and in the problems of clumsy children. In children with undefeated laterality, it contributed to lateralization, because these exercises were gradually used with the right and left hand, then with both hands and again with one hand. Since the middle of the last century, it has focused on the targeted motor development of the child, such as balance, coordination, and dissociation, i.e., the harmonious development of body perception, control of space and time, as well as shaping the relationship between the child and the

external environment. The technique was exclusively of neurological, anatomical, and psychological origin and belonged to the psychomotor reeducation techniques.

The good start method was first introduced in 1940. It was used in preparation for reading and writing lessons in primary schools, specifically in a primary school in Cannes, France. Before writing, students practiced large gestures, which gradually led to gentle movements when writing in notebooks. This method gradually gained more and more supporters and followers. As a result, it has spread beyond the borders of France, as well as to other European countries such as the Netherlands, Belgium, Portugal, Switzerland, and Spain [3].

Currently, the Good Start Method is most often used by kindergarten teachers, who, based on their experience, claim that it is the most effective method for children with delayed school attendance. However, it is also used successfully by special educators during employment with two to five children, either in the morning or in the afternoon. However, sometimes it is also necessary to work with those parents who work with their child or represent a teacher's assistant. A relatively large group consists of those teachers who use this method in the upbringing and education of children with special learning disabilities in special classes or with children who are integrated but are students of regular classes [14].

The characteristic features of this method are complexity and an approach that respects all the individual needs of the children. In addition, it contains every area that is an integral part of symptomatic learning disabilities. The method of a good start with good results is also used in special schools, but also outside of teaching for groups of Roma children, as their extremely good sense of rhythm, joy of singing and movement can be used very well in this method. Even several special schools successfully use this method in the practice of reading and writing [14]. Professor Hana Jaklewicz became acquainted with this method in 1967 in Paris and transferred it to Poland. The Polish version was developed by Marta Bogdanowicz. From the organizational point of view, this version is divided into the following three parts: introductory - preparatory exercises, own employment and ending the lesson.

1. Introductory, preparatory exercises – within them it focuses on practicing attention concentration, correct posture, mastering right-left orientation, perception of the physical side. The introductory part, as well as the whole lesson, is accompanied by songs and rhymes.

During the interview with the lecturer, we get information about the level at which the children understood the text and whether they understand unfamiliar words. The text of the song and the rhyme serves as an articulation exercise - it develops vocabulary and practices the child's phonemic hearing.

2. Self-employment – this part includes movement exercises, movement-auditory exercises, and movement-auditory-visual exercises:
 - a) Movement exercises determine the kinesthetics-motor analyser. They include gymnastic exercises such as running, jumping, walking and relaxation exercises. Based on ontogenetic development, they first develop gross motor skills, i.e., movements of the head, upper and lower limbs, and then fine motor skills - palms and fingers.
 - b) An auditory analyser is added in movement-auditory exercises, as the goal is also to improve motor skills in coordination with auditory perception. Plastic bags filled with sand are used as aids. One plastic bag measure 45 x 10 cm and four plastic bags measure 10 x 10 cm. The child's task is to bang on the bag, either with his fingers or palms, and in the meantime, he also sings a song. The training is done first with one hand, then with both hands. They should be placed next to each other at the beginning of the hand, as they should have been crossed in the following exercises. In the initial phase, we do not change the position of the hand on the plastic bag. The exercises are concentrated in the middle of the bag, then the child proceeds from left to right. The most difficult exercises are practiced in various finger combinations.
 - c) Movement-auditory-visual exercises represent the most important stage. The basis is a set of graphic patterns – lines, geometric shapes and shapes that mimic letters. The patterns are arranged according to difficulty. There is also a song and a rhyme when rehearsing with an accompaniment, their rhythm coincides with the structure of the elements of each pattern.
3. Ending the lesson – it is possible to end the self-assessment. It is essential that we create space for positive evaluation so that children leave the exercise with a feeling of success [15].

Horáková [5] in Slovakia states the following structure:

1. opening, motivation, creating a friendly atmosphere;
2. getting acquainted with the song and the rhyme;
3. articulation exercises;

4. motor exercises;
5. motor-acoustic exercises;
6. motor-acoustic-visual exercises;
7. evaluation.

The essence of the lesson structure is very similar for all appointed experts. Each of them presents lessons, which are divided into introduction, core, and conclusion. When compiling lessons, everyone considers the needs and abilities of the child.

The work file entitled “Good Start Method” consists of three parts. It is a methodical manual, worksheets with exercises for the development of graphomotor skills, cassettes with singing and musical accompaniment [15].

The Polish version of the method is given at the beginning of the theoretical part. This is followed by a presentation of the Czech version. The next part is a comparison of the Czech and Polish versions. Based on the requirements of teachers, the author primarily placed great emphasis on basic, most important information. To make it easier to understand, she characterized the basic structure of individual lessons and the content of all steps. The text is written in simple language, very clearly and concisely. For beginners, all details and essential information are presented in individual lessons [15].

Among other things, the methodological manual also contains a list of songs and graphic symbols. It also includes 25 model situations, which are the structures of individual lessons. These lessons include a scaled-down graphic, a description of all the steps, as well as a record of the words. With the help of this methodological manual, it is very easy to write notes about the gained experience. The good start method contains 58 worksheets for the development of graphomotor skills, which are graphically developed at a very high level. All lowercase and uppercase letters are in the worksheets [15].

The main goal of the survey, which we conducted 11/2020 to 02/2021 with Oravecová [9], was to map counselling facilities that use the Good Start Method as an opportunity to develop graphomotor skills in individuals with mental disabilities and apply it in their practice.

We contacted 130 counselling facilities, we focused on employees of special pedagogical counselling centres and pedagogical-psychological counselling and prevention centres throughout Slovakia. We addressed not only public, but also private centres and centres at other facilities. A questionnaire survey and a quantitative analysis of the obtained answers

were the research methods. The questionnaire consisted of 25 items and consisted of three parts: an introductory, a professional and a final part. The introductory part of our questionnaire consisted of demographic questions.

In the second part, we raised questions that helped us obtain information about the purpose of the work. These questions focused on respondents' awareness of the Good Start Method as an option for the development of graphomotor skills in individuals with mental disabilities. Our intention was also to obtain information about the clients of the facility and about which experts they work with.

In the final part, our questions focused on finding specific methods that are used in facilities as a possibility of developing graphomotor skills in individuals with mental disabilities.

During the research, we sent 130 questionnaires via e-mail. Of the total number, 110 completed questionnaires were returned to us, which shows that the return rate of the questionnaires was 85%.

Given the scope of the data obtained, we decided to present the main results in the paper, which directly affect the Good Start method.

Question no. 4 was aimed at obtaining information about the type of facility in which the respondents work. Respondents had the opportunity to choose from two versions. Of the total number of completed questionnaires, 80 respondents are employed in special education counselling centres, which means 72.7%. 30 respondents, i.e., 27.3%, are employees of pedagogical-psychological counselling and prevention centres. The answers to this question point to us that we received almost 3 times more answers from the centres of special pedagogical counselling than from the centres of pedagogical-psychological counselling and prevention.



Fig. 1 Type of counseling equipment

Question no. 7 provided us with data on the location of centres in the whole of Slovakia. Out of 110 participating respondents to our survey, 47 marked western Slovakia. This number represents 42.7%. This data proves that the most answers were provided by employees established from western Slovakia. 35 participants in the survey, i.e., 31.8% of respondents are employees of centres operating in central Slovakia. 25.5% of respondents indicated the third option, i.e., eastern Slovakia. These results clearly indicate that we received the least (28) responses from Eastern Slovakia.

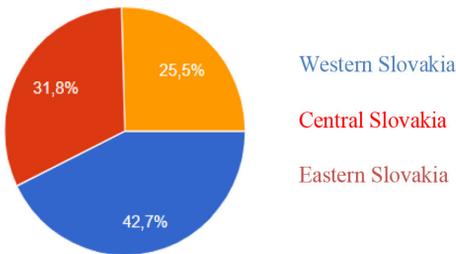


Fig. 2 Location of counselling equipment within Slovakia

In the following table (Tab. 2) we have shown the individual disorders and disabilities with which clients most often turn to centres of special pedagogical counselling and centres of pedagogical-psychological counselling and prevention. Respondents to this question had the opportunity to choose from several alternatives, they could even list other disorders and disabilities. After evaluating their answers, we learned that 85 (77.3%) respondents chose the possibility of learning disabilities. In second place was mental disability. 79 respondents chose this answer (71.8%). 69 respondents (62.7%), visual impairment 13 (11.8%), hearing impairment 36 respondents (32.7%), behavioural disorders 70 respondents (63.6%), ADHD 46 respondents (41.8%), impaired communication ability – 18 participants in our survey (16.4%). With the option “other”, the participating respondents stated the following disorders and disabilities: autism spectrum disorders were written by 4 respondents (3.6%), impaired disability 1 (0.9%), multiple disabilities by 2 respondents (1.8%), speech therapy problems 2 respondents (1.8%), sick and debilitated 1 of the participants (0.9%) and Asperger’s syndrome were also mentioned by 1 respondent (0.9%).

| Disorder / disability | Absolute number | Number in percent |
|--------------------------------|-----------------|-------------------|
| Mental disability | 79 | 71,8% |
| Physical handicap | 69 | 62,7% |
| Visual impairment | 13 | 11,8% |
| Hearing impairment | 36 | 32,7% |
| Behavioural disorders | 70 | 63,6% |
| Learning disabilities | 85 | 77,3% |
| ADHD | 46 | 41,8% |
| Impaired communication ability | 18 | 16,4% |
| Autism spectrum disorders | 4 | 3,6% |
| Health impairment | 1 | 0,9% |
| Multiple disabilities | 2 | 1,8% |
| Speech therapy problems | 2 | 1,8% |
| Illness and weakness | 1 | 0,9% |
| Asperger's syndrome | 1 | 0,9% |
| Total | 427 | |

Tab. 2 Disabilities that the counselling facilities work with

With the help of the 14th question in the questionnaire, we had the opportunity to obtain data on the addressed employees of special pedagogical counselling and centres of pedagogical - psychological counselling and prevention regarding their awareness of the Good Start Method. 89.1% of respondents to our survey have no information about the method we use in our work. This means 98 respondents out of 110 respondents. Only 10.9% of respondents (12 respondents) indicated the possibility that they know the Good Start Method. The results of our research were not at all surprising, because we assumed that most participants in our survey have no knowledge of the Good Start Method.

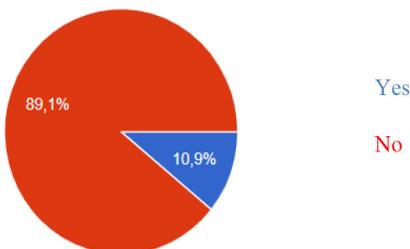


Fig. 3 Awareness of the Good Start Method

In the context of question no. 15, we tried to obtain information from the respondents about the source from which they drew information about the Good Start Method. Most respondents read articles about the method on the Internet from various experts. Two participating respondents have even completed training on the Good Start Method, and one respondent has applied for online training on this method.

| | A source of knowledge about the Good Start Method |
|-------------------|--|
| Respondent no. 1 | She attended a seminar with Dr. Swierkoszová |
| Respondent no. 2 | From training |
| Respondent no. 3 | Within the Association of Special Educators, the course was led by Dr. Swierkoszowa |
| Respondent no. 4 | She read a lot about it on the Internet and signed up for online education for this method |
| Respondent no. 5 | From various articles |
| Respondent no. 6 | She read articles on the Internet |
| Respondent no. 7 | From professional articles |
| Respondent no. 8 | In 2004, she was trained in this method by a lecturer from the Czech Republic, Mrs. Jana Swierkoszová, who applied the method to Czech conditions. |
| Respondent no. 9 | From the conference and from the Internet |
| Respondent no. 10 | As part of training information |
| Respondent no. 11 | From various articles |
| Respondent no. 12 | From the internet |

Tab. 3 Sources of information on the Good Start Method

Our intention was to obtain information about the experience of our respondents about the possibility of using the method in their practice. 97.3% of respondents (107 respondents) stated that they did not use this method at all. Three respondents (2.7%) wrote that they use the Good Start Method.

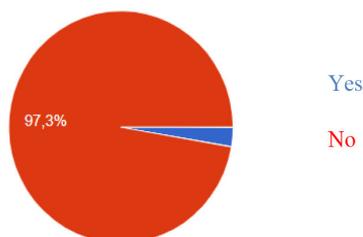


Fig. 4 The possibility of using the Good Start method in the practice of respondents

This item is very similar to the previous one, but with this we wanted to get concrete real information about the applicability of the Good Start Method, specifically in the development of graphomotor skills in individuals with mental disabilities. After evaluating the answers to this question, we concluded that the Good Start Method as an option for developing graphomotor skills in individuals with mental disabilities is used by only one counselling facility, which shows that 99.1% of respondents, i.e., 109 counselling facilities do not use this method. as an opportunity to develop graphomotor skills in individuals with mental disabilities and 0.9% use it.

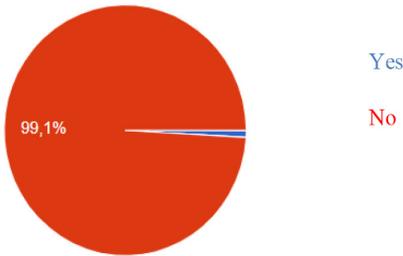


Fig. 5 Possibility to use the Good Start method for the development of graphomotor skills in individuals with mental disabilities in practice

Using question no. We obtained information on whether pedagogical-psychological counselling and prevention centres and special pedagogical counselling centres use other methods and materials for developing graphomotor skills in individuals with mental disabilities. The results were very surprising, as out of the total number of respondents, 66.4% (73 respondents) chose the option of not using other methods or materials to develop graphomotor skills in individuals with mental disabilities. 33.6% of respondents (37 respondents) answered yes, i.e., they use other methods and materials for the development of graphomotor skills.

| Number of respondents | Methods and materials for the development of graphomotor skills in individuals with mental disabilities |
|-----------------------|---|
| 14 | Kuliferdo |
| 9 | Own materials |
| 3 | Heyrovsky method |
| 1 | In the form of developing fine motor skills, which is responsible for the movement skills of the hand - movement activities of the whole hands (from the shoulders to the fingers), modelling, cutting, gluing, pulling paper, finger painting, drawing on various substrates (sand), thicker and thinner crayons), practicing the correct grip of writing instruments with different handpieces. |
| 1 | Various exercises for the development of fine motor skills, games, movement-rhythmic exercises, handicrafts, and activities, copy imitation, production of worksheets, work with Kuliferd |
| 1 | Various graphomotor worksheets also made e.g., Šimon's worksheets, Kuliferdo, etc. |
| 1 | Simon's worksheets, graphomotor skills with a mole |
| 1 | Preschool worksheets and Kuliferdo worksheets |
| 1 | Various exercises for the development of fine motor skills according to the needs of the child |
| 1 | Methodical material from Jirina Bednářová and Vlasta Šmardová |
| 1 | Own developed methods |
| 1 | Graphomotor exercises |
| 1 | Stimulation programs |
| 1 | Different worksheets and own methods |
| Total: 37 | |

Tab. 4. Methods and materials for the development of graphomotor skills in individuals with mental disabilities used in practice

The main goal of the survey was to map counselling facilities in Slovakia, which use the Good Start Method as an opportunity to develop graphomotor skills in individuals with mental disabilities and apply it in their practice. From the results of the survey, we can state that the majority of employees of centres of special pedagogical counselling and centres of pedagogical-psychological counselling and prevention (89.1%) do not use or know the Good Start Method, while it is a comprehensive approach which not only performs a corrective function. Only 10.9% of respondents (12 respondents out of 110) know this method, but only 0.9% of counselling facilities actively use it as an opportunity to develop graphomotor skills in individuals with mental disabilities.

References

1. Bajo I, Vašek Š. *Pedagogika mentálne postihnutých (Psychopédia)*. Bratislava: Sapiaientia; 1994.
2. Bazalová B. *Dítě s mentálním postižením a podpora jeho vývoje*. Praha: Portál; 2014.
3. Bogdanowicz M, Swierkoszová J. *Metoda dobrého startu*. Ostrava: Kasimo s.r.o.; 1998.
4. Gregušová H., Valachová D et.al. *Determinanty rozvíjania výtvarného nadania u jednotlivcov so zdravotným postihnutím v inkluzívnom prostredí*. Bratislava: Univerzita Komenského v Bratislave; 2015.
5. Hatalová J. *Metóda dobrého štartu v primárnom vzdelávaní*. Prešov: Metodicko-pedagogické centrum; 2012.
6. Looseová AC, Piekertová N, Dienerová G. *Grafomotorika pro děti předškolního věku*. Praha: Portál; 2001.
7. Nagy J. et.al. *Az elemi alapkészségek fejlődése 4-8 éves életkorban* -összes példány. Szeged: Mozaik Kiadó; 2004.
8. Opatřilová D. *Pedagogická intervence v raném a předškolním věku u jedinců s dětskou mozkovou obrnou*. Brno: Masarykova univerzita; 2004.
9. Oravecsová F. *Metóda dobrého štartu ako možnosť rozvíjania grafomotoriky u jednotlivcov s mentálnym postihnutím*. Diplomová práca. Univerzita Komenského v Bratislave; 2021.
10. Přinosilová D. *Diagnostika ve speciální pedagogice: Texty k distančnímu vzdělávání*. Brno: Paido; 2004.
11. Svobodová J. *Metodika rozvoje grafomotoriky a počátečního psaní*. Praha: IPPP; 1997.
12. Thorne G. *Graphomotor skills: why some kids hate to write*. Center for development and Learning [online]. Available from: Graphomotor Skills: Why Some Kids Hate To Write - The Center for Development & Learning (cdl.org)
13. Uváčková I, Valachová D, Droppová G. *Metodika rozvíjania grafomotorických zručností detí v materských školách*. Bratislava: Orbis Pictus Istropolitana; 2009.
14. Zatorská J. *Rozvíjanie grafomotorických zručností žiakov špeciálnej základnej školy*. Bardejov: Metodicko-pedagogické centrum; 2012.
15. Zelinková O. *Metóda Dobrého štartu, jedna z možností rozvíjania psychomotoriky*. In: *Pedagogika*; 2000.
16. Nagyová K, Harčaríková T. *Siblings of children with oncological illness* [elektronický dokument]In: *AD ALTA* [elektronický dokument]. 2019; 9(2):220-226. ISSN (print) 1804-7890
17. Nagyová K, Harčaríková T. *Problems of families with a child with an incurable disease in the context of special education*. CBU International Conference Proceedings 2016: Innovations in science and education. Vol. 4. Praha: Central Bohemia University; 2016. p. 676-682. ISBN 978-80-88042-05-1 [Innovations in science and education : International Conference. Praha, 23.-25.3.2016]

18. Vančová A. Inovácie v teórii, metodológii a praxeológii pedagogiky mentálne postihnutých. 1. vyd. Ostrava: Ostravská univerzita, Pedagogická fakulta; 2014. 200 p.
19. Šulovská M, Vančová A, Neupauerová N. Laterality and its influence on the written expression of intellectually disabled pupils = Lateralita a jej vplyv na písomný prejav žiakov s mentálnym postihnutím]. *XLinguae*. 2019; 12(4):130-142. ISSN (print) 1337-8384. Available from: http://wp.xlinguae.eu/files/XLinguae4_2019_11.pdf



NEUROPEDAGOGICAL ASPECTS OF EDUCATION AND THEIR APPLICATION TO THE INTERVENTION PROGRAM “COMPLEX MOVEMENT THERAPY”

Nikoletta Szászová, Alica Vančová

Abstract. Neuropedagogical approaches to education can be considered as a more productive means of education. These methods are becoming increasingly popular. In the modern education neuropedagogy is understood as a special branch of pedagogy that deals with the neural basis of learning, the relationships between the maturation of the nervous system and the development of movement, the maturation processes of the nervous system, their effects on learning, and psychological barriers to learning. Because of the fact that the development of movement is closely related to the maturation of the nervous system, several intervention methods are based on theories neuropedagogy. Movement is the first means of communication with the world. Human-specific communication skills, such as speaking, reading and writing are all based on primary movements. If movement development deviates from its genetically programmed order, it could impact growth at the level of the cerebral cortex. The aim of our article is to focus on the issue of neuropedagogy and the individual possibilities of intervention based on the knowledge of the mentioned scientific discipline.

Keywords: neuro-pedagogy, education, movement therapy, intervention.

Characteristics of the selected term - neuropedagogy

The pedagogical science, which is the science of education, has a new, so to speak, newborn branch called: neuropedagogy. If we were to ask about the meaning of the mentioned term in the general pedagogical public, we could assume that most of them would not be able to define the term neuropedagogy. Neuropedagogy is a relatively new area in the pedagogical practice. This is a highly interdisciplinary field of education: its content is developed from the collaboration of close dialogue and research of neurology, psychology and pedagogy. We as educators need to have a basic understanding of the anatomy and functions of the human brain, how our hemispheres, nerve cells, and other parts work. One encounters this knowledge mainly in the context of developmental psychology and also during the deepening of one's knowledge of various neurosciences.

Neuropedagogy deals with the influence of neuroscientific knowledge on pedagogy and didactics and explores how learning and teaching

can be adapted to this knowledge. It tries to fill the gap created between pedagogy, didactics and neuroscience.

We are of the opinion that there is no strict “dividing line” between the brain-based knowledge and its appreciation in teaching, but rather the opposite.

According to many experts, neuropedagogy and neurodidactics, which are becoming increasingly popular in many countries, could also help to increase the efficiency of the procedural side of education. Several neuroscientists, psychologists, but also educators characterize them as a “revolution in education”, or as “education for the 21st century”. Neuropedagogy can therefore be understood as more comprehensive pedagogical training approaches, currently referred to as educational approaches [1].

Understanding the basis of the neuroscientific aspect in special pedagogy is important in terms of the functionality of the central nervous system (CNS) and brain structures, which can provide a more comprehensive view of the overall development of humans. In our profession, we often encounter disabilities, disorders and threats to the brain (or CNS) in individuals as part of our assistance. As a result, we consider it important to characterize and describe the various brain functions, which are important to the learning process.

We continuously learn all our lives. Learning is a human’s most common and complex activity. With the accumulated results of childhood brain research, it can be said that by the time a child enters the age of institutional learning, much has already been decided – the essence of personality, knowledge system and social skills. This increases the pedagogical responsibility for the first six years. Although the physiology of the brain is well known, the creation of its product, the idea, is still largely done in the “black box”. Nevertheless, in the light of neoconstructivism, with the new scientific findings on the development of the child’s brain and the child’s learning, we can welcome the emergence of a new pedagogical discipline, neuropedagogy (educational neuroscience). Its attention is focused on how the child learns, how to provide him or her with the best complex learning conditions, and how we can best help him or her learn [2]. The characteristics of the nervous system of a given species - mainly its ability to learn – are determined by two characteristics: specificity (formation) and plasticity (formability) [3]. Humans have a specific, closed-program genes, but plasticity is made possible by many more genes, and the end result is a real miracle. By the age of

two, a child has far more nerve cells than he or she will retain. After the so-called differentiation, up to half of the neurons in each region of the brain are killed. Only neurons that have established a well-functioning relationship with other cells and that have quite a few well-functioning axons survive [4]. So it is important what stimuli and environmental effects affect a person in the early years, so early development is both important for proper speech and movement development.

László Varga and Viktória Farnady-Landerl on the definition of neuropedogy [2]: childhood neuroscience, cognitive psychology, neuropsychology, neurophysiology, social psychology, with a view to integrating the relevant qualitative and quantitative research findings and experiences of all these disciplines into the practice of educational processes.”

[4] summarizes what has been said so far: neuropedagogy is the purposeful communication of the branches of education, as well as of some branches of neuroscience and psychology, with the aim of making the practice of education as effective as possible by integrating research results.

The neuroplasticity of our brains

Ostatníková [5] states that genes and the environment are decisive for complex brain development as factors that significantly influence this complex and long-term process. The perception of events around us is conditioned by the thousands of neurons organized by the brain and the creation of a network for their interconnection. We can state that the brain already has a huge synaptic capacity at this stage of development (postnatal). Rozvadský Gugová [6] claims that all the information that comes into the human brain goes from the body through the senses to their registration through synapses. Synapse chains connect neurons into a functional locomotor system, such as walking, contracting a muscle, blinking an eye or understanding a written text or solving a mathematical problem. Synapses, which represent the communication of two nerve cells in the brain, are not permanent and are constantly changing. The learning process is the result of the activity of synapse function [6]. The human brain supports the growth of synapses (from birth to year 5 up to 4-fold increase), but only one third of them survive into adulthood [7].

Brain plasticity is conditioned by the number of these connections, which in turn affect the brain's ability to change based on different experiences [5]. Horňáková [7] adds that in addition to the reorganization of these tracks, new connections are also being created. Brain plasticity

also includes changes in the form of expressions and synapse functions that remain active throughout our lives [8].

The terms neuroplasticity, neuronal plasticity or brain plasticity are used in the literature [8], [9], [10]). Many experts have been dealing with brain neuroplasticity for several years. U.S. experts such as Shaw, McEachern [11] describe the term neuroplasticity as a change in the nervous system that occurs at all levels of the nervous system. Doidge [12] mentions neuroplasticity as the brain's ability to learn. In his publication, he talks about research from 1960 done by the American neuroscientist Michael Merzenich, who with his experiments proved the possibility of changing brain functions through conscious training. In his publication, based on the results of this research, Doidge [12] agrees with the neuroscientist that the brain retains the ability to change into adulthood. Prior to the advent of modern imaging techniques, several experts had argued that the human brain did not have to be as inalterable as science described it. Research in the 1960s by David Hubel and Torsten Wiesel of Johns Hopkins University found that the brain needed certain stimuli to function optimally. The time space when a given area of the brain needs the right stimulation for optimal organization is called the critical period. Researchers have also shown that other brain systems also need external impulses to develop properly, with critical periods for each system varying significantly [12].

The function of the brain to maintain its plasticity during a person's life is not stable. During puberty, synaptic capacity decreases by half and then to a quarter. The ability to plasticize is lost in the case of reduced brain activity, what is used is preserved, what is not used is lost (English use "use it or lose it"). Time programming of the development of basic brain functions determines the correct human response to the influences of the environment and to the process of social and cognitive learning [5].

The plasticity of the human brain is one of its basic properties with two important components, which are sensitive periods and changes conditioned by activity. The first component points out those aspects of brain development for which, from the point of view of development, the critical input of some stimuli in terms of time is important. Due to the absence of brain stimulation at the right time, a person will not develop some (even decisive) abilities. A good example of this is the emergence and development of language skills, for which the most important period is early childhood. The second component includes the psycho-

logical and biological impacts coming from our environment. Based on the influences of these factors (intrauterine development, childhood life experiences, etc.), our brain is constantly changing. These components of brain plasticity explain their importance, but also possible ways in which their disruption can lead to impaired brain functions [13].

Vančová and Smolianinov [14] state that according to the latest research, the brain can change its structure as well as its function based on thinking and activity. Thanks to neuroplasticity, the brain can reorganize itself and has the ability to replace damaged areas in terms of function. Differentiated activities have a role to play in improving the functional circuits of the brain to match current tasks. Sensory analyzers have a relatively sufficient plastic character, and if one of them is damaged, the other analyzer is able to represent the sense. In this case, we are talking about sensory substitution. Orel [8] also agrees with the fact that brain plasticity is one of the prerequisites for the formation of neural networks in every human being. He also notes that neuroplasticity underlies the ability to learn and remember. According to the cited author, an important factor in the field of brain plasticity are the developmental stages, resp. age of man.

Brain plasticity is therefore most effective in childhood, when the brain can compensate for even greater damage. The experience gained in childhood, especially with a strong emotional charge (both positive and negative) leaves a mark on the brain and their effect can change the structure and function of neural networks. As a result of knowing this fact, the positive or negative effects of early experiences on our behavior throughout our lives can be clarified. In particular, the positive effects of the experience gained can help to restore and develop lost or impaired functions and possibly compensate for certain handicaps. Neuroplasticity is an important functional feature of brain connectivity and probably participates in the perceptual and procedural components of learning and memory [8].

Motor skills as an important factor

Motor development in the first year of a child's life is very important from a developmental point of view, as the child develops physically the most in this period. At a later age, the level of individual developmental milestones plays an important role in obtaining information about whether the child has completed these developmental periods. The omission and failure to control some elementary movements can cause difficulties in school success.

In the case of intact development, the baby moves from the initial uncoordinated movements to the upright position by the end of the neonatal period due to the maturation of the nervous system, appropriate environmental influences and a large amount of movement, and takes the first independent steps. In addition to intact regulation of the nervous system, healthy locomotor organs are also important to ensure normal motor development. Exercise requires optimally functioning sensory organs, an adequate level of alertness, good function of the components of attention, and adaptive behaviour. During the development of movement, not only a new form of movement becomes a possibility, but the basis is also a qualitative change in the relationship to the environment and the development of manipulation. The changes that result from movement return back to the nervous system as impulses, and as a result, the structure of the brain becomes more complex with parallel and other mental functions. For example, toddlers learn and discover the world around them primarily through movement and activities.

As the child moves more, he learns to control his movements better. Whenever he makes a movement (shakes his head, kicks his feet), the motor cells begin the process of adaptation, and these processes are strengthened with each repetition. Movement through modification contributes to the completion of synapses, because reflexes are the child's primary source of movement. Reflexes themselves can be used as indicators of development and help us understand why movement in a person's life is so important to the learning process [15].

KMT intervention program as a neuropedagogical approach

In special pedagogical theory and practice, Vančová [16, 20, 21, 22] perceives a holistic understanding of a person with a disability as a connection between an interdisciplinary approach and comprehensive multidisciplinary care (diagnostics, intervention, correction, stimulation, education, counseling, therapy, rehabilitation). In this sense, man is understood as the integrity of the bio-, psycho-, and social dimensions of being. The presented modalities in interactions with each other and with the environmental, natural and especially social environment ensure the existence of man in a harmonious whole. These starting points form the basis for creating a new framework of interventions, which can be described in terms such as neuropsychopedagogical intervention, neuropsychophysical correction or therapy [16; 21; 22].

Interpretation of the KMT program

During the interpretation of the intervention program Complex Movement Therapy (in short KMT) we draw on the literature from neuropedagogue Kulcsár Mihályné, the author of this form of movement therapy, which developed and supplemented the original structure of therapy by American neurologist Carl Henry Delacato.

Theoretical background

The origins of the mentioned movement therapy are related to the American neurologist Carl Henry Delacato, who approached the issue with his own group of experts. They elucidated the parallel line between human phylogeny and ontogenesis. According to this group of experts, ontogenesis does not copy phylogeny only at the physiological level, but takes place in all areas of development. Experts have pointed to the fact that physical development is directly related to the matured central nervous system [17].

The technique of therapy is based on the theory of neurological organization, which states that the ontogenetic development of each individual is the same as the phylogenetic development of a human. The theory states that neurological development has its basis in sequence, it begins with the development of the central nervous system from the spinal cord through the old brain to the cerebral cortex and ends with the dominance of one of the cerebral hemispheres [19].

Delacato's group of experts, consisting of neurologists, psychologists, neurosurgeons, orthopedists, physiotherapists and caregivers, began working together in 1958. The group carried out research in the field of developmental disorders. The authors proceeded from the theory that it is necessary to get to the central cause of the problem and its subsequent elimination as a neurological defect. The first research was conducted with clients who had brain damage and could not speak. At the end of the research, it was found that most respondents learned to walk independently, but even more important is the fact that 59% of children began to speak without the application of any speech therapy intervention. As a result, they have found that with this therapy we can develop skills in children with severe brain disorders, thus we can also develop skills in children who only have neurological disorganization [17].

The theory of brain neuroplasticity, which we have already discussed above, forms the basic pillar of the KMT intervention program.

Another pillar of the KMT is based on research by the Italian neurologist Rita Levi-Montalcini, in which she pointed out that with movement the number of neurotransmitters and the number of synapses may increase, thus achieving better functioning of the nervous system (she earned a Nobel prize in 1986 in the given field).

The individual theories presented form the basis of the method of neuropedagogue Kulcsár Mihályné. The author began to verify her intervention program directly in practice and gradually developed a more difficult version of Delacato's method of movement therapy. It has enriched the development program with new areas, such as space perception, balance and areas for the development of fine motor skills.

KMT has been an accredited program available to the professional public in the Republic of Hungary for more than 20 years.

The KMT intervention program in the territory of the Republic of Hungary is used mainly by teachers, special pedagogues, psychologists and speech therapists. Its application is possible in the form of individual meetings, but there is also a generalized simplified form of the program for smaller groups (e.g. one class in kindergarten or primary school). In most cases, they use this form of intervention in private counseling centers to reduce immaturity that negatively affects an individual's overall academic performance and behaviour.

The comprehensive intervention program is based on knowledge from various neurosciences and uses movement to harness the great potential of the human brain for the success of individuals in the educational process. KMT is therefore based on the elimination of deficits (cognitive, physical) through physical exercises.

Program structure KMT

The structure of the therapy itself is based on the correct determination of the current state of the individual, while the therapist needs reports from medical, psychological, special pedagogical examinations and an important point is the completion of an anamnestic questionnaire to parents.

While participating in the intervention program, the first progress may start after the second or third week. We state that initially performance growth is very effective, but then it can enter a phase of stagnation, and only later will there be a rapid change in the success of the individual.

Kulcsár [17] characterizes the factors that affect the effectiveness of therapy:

- The intellect of the individual,
- Attitude of the individual,
- Attitude of parents,
- Pedagogical characteristics of the child / pupil.

Compiling individual exercises requires passing entrance testing, which is comprehensively focused on various areas - movement skills, cognitive abilities, social competencies.

An evaluation sheet in which the expert writes down his / her findings and indicates how much the individual manages the task is currently only available in Hungarian. In the empirical part we interpret its Slovak version, which was translated by the author of the diploma thesis (professional language proofreading is required for its implementation).

The test battery is originally a sophisticated test of school maturity, so it provides a relatively accurate picture of the ability of a child aged 5-6 years, as during testing we do not scale the level of individual areas, but only indicate whether the individual in the area needs development [18].

The evaluation is adapted to the abilities of a 5-6 year old child. We can also evaluate in 3-4 year old children, but a child at such an age may show a deficit or immaturity in many areas. In these cases, the expert should focus mainly on the evaluation of spatial perception, balance, elementary movements and dominance (hands, feet, eye, ear). A three-year-old child, if his nervous system is mature, can already perform the required movements correctly. An even more absent sense of duty may appear to be a problem for younger children, which can make regular exercise a burden for them and their families.

An individual's initial testing takes approximately two to three hours, depending on the individual's current mental disposition and concentration.

The evaluated areas within the testing are in a precise sequence. To test individual areas, there are precisely defined tasks (worksheets, activities, situation games), which we do not mention due to the preservation of copyright of the KMT program. In particular, areas such as motor skills, laterality, balance, basic knowledge, thinking, memory and attention are evaluated within the diagnostics. The individual areas that are tested within the KMT are listed in Annex B. With the implementation of

the evaluation and the subsequent allocation of adequate physical exercises, one gets acquainted with the course of the intervention program.

During the initial assessment, the parent fills out a questionnaire (anamnestic data about the child about the family), then lists the problems on the basis of which they sought help in the form of KMT. After conducting an interview with the parents, the expert establishes contact with the client himself. It goes through the sequence shown in the record sheet and indicates whether the test area is intact or, conversely, problematic. Weakened areas will serve as an indicator for the expert when setting up an individual KMT program.

Description of the course of therapy

Exercises are performed by the child at home under the supervision and coordination of the parent, optimally at least five times a week. There are no contraindications for movement therapy, they can be used from the age of five to adulthood. For the effectiveness and efficiency of the therapy, it is recommended to do the exercises systematically every day in the home environment for a period of 20-30 minutes [17].

The control meeting of the individual with the therapist takes place monthly, weeks. At these meetings, the expert will find out the current level of motor skills and assess whether it is already possible to advance to the next level of the program [17]. The control meeting consists of two main elements. First, the therapist informs the child and the parent about the registered changes for the last month (it focuses mainly on areas in which the child showed a deficit during testing, as we expect a certain positive shift in these areas) [18].

In the next part of the control meeting, the child should interpret all the exercises in the total number as assigned. The therapist monitors whether the child's movement is correct and automated. If the therapist notices a qualitative shift during the exercises, the child can move on to the next item in the exercise sequence. If this is not the case, the child will continue to exercise the same series of movements in the following month [18].

The therapy process can end in different ways [18].

1. Successful completion - in the optimal case, the individual achieves the set goal, reaches the required level in areas where deficits have been identified during testing. If there are no positive changes during three consecutive months during development, it can be assumed that the maximum possible level achievable for a particular individual has been reached.

2. Exhaustion of limits – the individual successfully goes through the whole program and perfectly masters all exercises. However, despite completing the entire program, he failed to achieve the goals set at the beginning of the program. In such cases, it seems useful to try another form of therapy that would help the individual from another aspect (although even in that respect, maximum success may not be guaranteed). Namely, once an individual reaches his limits, he may not be able to make a qualitative shift in any other way.

3. Stopping the program - the family for some reason gives up its child's participation in KMT. Failure in the intervention program is usually the resultant factor in the child's aversion to therapy (parents are unable to motivate their child to cooperate).

The use of the KMT intervention program is very wide, as it focuses on various areas of development and offers options for solving individual disorders.

Conclusion

KMT programme focuses on the nervous system's processes that determine the quality of attention, concentration, memory and performance. This approach uses a complex development procedure to help solve and prevent the learning and behavioural difficulties. The science of neuropedagogy helps to overcome learning difficulties, attention disorders and behavioural disorders through the targeted development of children's nervous systems. It could also help in the rehabilitation of the nervous system of children with brain injuries and help explore and resolve the background of learning disabilities of mental origin. Neuropedagogy also offers a helping hand to parents who have trouble dealing with difficult situations. It provides advice to the child's educators to address their disadvantages. The constant expansion of this discipline offers more and more opportunities for those in need of development.

Resources

1. Petlák E, Trníková J. Neurodidaktika a vyučovanie - Úvod do problematiky mozgovokompatibilného učenia. Verlag: GRIN; 2010.
2. Varga L, Farnady-Landerl V. Új fejezet a konstruktivista pedagógiában: a neuropedagógia, In: Szerk.: Hanák Zsuzsanna A magyar tudomány ünnepe 2015: Az iskolai sikeresség pedagógiai-pszichológiai háttere. Eger: Líceum Kiadó; 2017.
3. Hámori J. Az idegrendszer funkcionális szerveződése és plaszticitása. *Studia Physiologica* 17/2012. Budapest: Semmelweis Kiadó, 2012.
4. Baranyai M. Láthatatlan neuropedagógia. Tatabánya: Soproni Egyetem; 2020.

5. Ostatníková D a kol. *Základy lékařské fyziologie*. Bratislava: Univerzita Komenského v Bratislave – vydavateľstvo UK; 2015.
6. Rozvadský Gugová G a kol. *Neurodidaktika a edukácia*. Dubnica nad Váhom: Dubnický technologický inštitút; 2014.
7. Hornáková M. *Včasná intervencia orientovaná na rodinu*. Bratislava: Univerzita Komenského v Bratislave; 2010.
8. Orel M, Procházka R a kol. *Vyšetření a výzkum mozku: pro psychology, pedagogy a další nelekárské obory*. 1. vyd. Praha: Grada; 2017.
9. Grawe K. *Neuropsychoterapie*. Praha: Portál; s.r.o., 2007.
10. Brodal P. *Centrálny nervový systém štruktúra a funkcia*. 1. slovenské a české vyd. Martin: Vydavateľstvo Osveta, spol. s.r.o.; 2008.
11. Shaw CA, Mceachern JC. *Toward a theory of Neuroplasticity* [online]. Philadelphia: Taylor&Francis Group; 2001.
12. Doidge N. *Váš mozek se dokáže změnit*. Brno: Computer Press, a.s.; 2011.
13. Gáliková S. *Základy kognitívnej neurovedy*. 1. vyd. Trnava: Filozofická fakulta Trnavskej univerzity v Trnave; 2013.
14. Vančová A, Smoljaninov AG. *Program Ruka-Mozog*. Bratislava: Pedagogická fakulta Univerzity Komenského v Bratislave vydavateľstvo IRIS s.r.o.; 2014.
15. Goddard Blythe S. *Dieťa v rovnováhe*. 3. vyd. Bratislava: Inštitút psychoterapie a socioterapie; 2016.
16. Gogová T, Biščo Kastelová A, Prečuchová Štefanovičová A, Šulovská M, Vančová A. *Pedagogika mentálne a viacnásobne postihnutých raného a predškolského veku*. 1. vyd. Bratislava: Iris; 2013. 244 p.
17. Kulcsár M. *A tanulás öröm is lehet, Delacato módszer alapján*. Bicske: Magánkiadás; 2014.
18. Kulcsár M. *Kulcsár Mihályné által kidolgozott komplex mozgásfejlesztő tevékenység elméleti háttere és hatékonysága a gyakorlatban*. Győr: Széchenyi István Egyetem; 2020.
19. Hudson MA, Murphy GC, Clunies-Ross GG. *Research into the Doman-Delacato Method: Implications for Special Educators*. Cambridge: Cambridge University Press; 2016.
20. Vančová A. *New perspectives of special education: transfer of knowledge in neurosciences to development and innovation in rehabilitationen, corrective and therapeutic methods baseed on interdisciplinary intervention with a focus on children with CNS Damage*. In: *New perspectives in special education*. Havlíčkův Brod: Tobiáš; 2013. p. 52-88. ISBN 978-80-7311-141-0
21. Vančová A, Smoljaninov GA. *Neurodynamic stimulation and correction of motor disabilities and anomalous motor development and functioning of children with CNS damage = Neurodynamična stimulacija ta korekcijamotornich porušeň, anomal'nogo motornogo rozvitku ta dziezdatnosti ditej iz uraženjam central'noj nervovoj sistemi*. In: *Osoblivá ditina : navčannia i vychovannia : Exceptional child: teaching and upbringing*. 2014;70(2):91-111. ISSN 2312-2781

22. Vančová A. New methods of stimulation, rehabilitation and correction of motor disabilities and optimisation of anomalous psychomotor development as results of transfer of knowledge in neuroscience to theory and practice of special education focused on children with CNS damage. In: International Journal of Multidisciplinary Thought [elektronický zdroj]. 2014;4(4):287-305. [CD-ROM]. ISSN 2156-6992
23. Vančová A. The impact of neurodynamic intervention on motor and social development of children with cerebral palsy and mental retardation. In: Osoblivá ditina : navčannia i vichovannia: Exceptional child: teaching and upbringing. 2014;69(1):79-95. ISSN 2312-2781



FEATURES OF THE SUBJECTIVE QUALITY OF LIFE OF PEOPLE WITH DISABILITIES

Leysan Zakirova, Lyubov Komarova, Landish Khamitova (Transl.)

Abstract. The peculiarities of the life of children with special needs is one of the main tasks for the country. The need to create conditions for an inclusive society where everyone can feel the involvement and relevance of their actions is one of the priorities in social policy. It is necessary to give every child the opportunity, regardless of their needs and other circumstances, to fully realize their potential, benefit society and become a full-fledged member of it. The purpose of the article is to identify the specific features of the subjective quality of life for people with disabilities. The structure of the presented work includes meaningful and effective components. Taking into account the results of this study, a number of scientific problems and promising areas can be identified that require further consideration: deepening and expanding some of the provisions set out in the article related to the systemic change in the personality of sick children, which should generate appropriate psychological and pedagogical support and constant monitoring of the characteristics of this particular child. According to studies related to children with disabilities, a professional approach in this area has shown that this group of children should be considered from the point of view of the causes of disorders in their development; the presence of evidence of these violations with the specification of their nature; studying the consequences of violations that have their own delayed negative result.

Keywords: children with disabilities, quality of life, life well-being, specific features of development, developmental disorders.

Introduction

The problem of the situation of children with disabilities occupies one of the priority places in the social policy of the Russian state today. Within the framework of this policy, various State and non-State organizations and institutions carry out their activities to ensure a decent standard of living for such children. This is due, in particular, to the forecasts for the disability of the child population, which, unfortunately, presupposes its further growth [1], as well as the results of sociological studies on the continuing deterioration of the health of children and adolescents [7]. All kinds of difficulties in obtaining the necessary assistance create additional difficulties in the life of a Russian family in the conditions of socio-economic transformations [4; 5]. In this context, the organization of a more detailed study of the problem under consideration can be called relevant.

The purpose of the study is related to the fact that there is a certain lack of data on the study of the characteristics of the subjective quality of life of children with disabilities and to identify the specific features of the subjective quality of life for people with disabilities.

Research material

As the analysis of psychological and pedagogical literature on the subjective quality of life of children with disabilities has shown, in the practice of socio-pedagogical systems of educational institutions in Russia and abroad, one of the important aspects of the theoretical analysis of research is the study of the features of this phenomenon. According to the Ministry of Education and Science of the Russian Federation, the total number of children with disabilities in the republic in 2019 amounted to 22,098 people, or 2.7% of the total child population of the republic. Of these, the number of children with disabilities of preschool age is 9,178 people; the number of children with disabilities of school age is 12,920 people.

It draws attention to the fact that the indicator of the number of children with disabilities by the end of 2019 is the largest in the last five years. Compared to the previous year, the number of children with disabilities increased by 19%, or 3,534 people. The share of children with disabilities from the total child population of the republic has also increased (from 2.3 to 2.7%).

The number of children with disabilities of preschool age has increased significantly (by 2,708 people). Of the 12,920 children with disabilities of preschool age who were registered with the education authorities, the largest part are children with speech disorders (36%), visual impairment (19%) and musculoskeletal system disorders (9%).

At the same time, a network of specialized state budgetary educational institutions for children with disabilities has been preserved and is developing. In the 2019/2020 academic year, there are 1,522 such schools. 7,920 children or 61.3% of the total number of children with disabilities study in such specialized institutions. The rest of the children with disabilities are in rehabilitation or are home-schooled. Over 15,128 children have the official status of a disabled person.

The lack of rehabilitation and habilitation programs negatively affects the processes and indicators of social integration of disabled people. Most of them have been living in isolation since childhood, unable to realize their potential and needs. Social maladaptation also applies to family members of disabled people. At the same time, it is important to

note that most researchers describe the subjective quality of life of children as universal for all ages of this social group, while when determining the components of the psychological quality in question, it should be investigated from the point of view of studying children as disabled children [2].

The results of the study and their discussion

One of the features is the formation of a disabled child's ability to overcome the difficulties of socialization when he has to expand the boundaries of his life activity space with difficulty. To ensure the possibility of this process, adults caring for a disabled child should take into account the logic of his natural development, which is associated with the satisfaction of his basic needs. The natural line of development of such a child is the consistent achievement of certain goals by him as they arise. Otherwise, the child will not learn to control the events happening to him, which usually leads to a slowdown in the process of his social adaptation. Thus, in order to improve the subjective quality of life, a child with disabilities needs active social interaction, where he, as a subject, independently chooses a strategy of behavior in relations with others. To be included in the surrounding world, a disabled child, with the help of parents, carries out active and purposeful actions, showing his subjective position, thereby revealing his inner potential. Despite his limited health opportunities, he tries to actively interact with the social environment surrounding him, defending his own individuality and significance. The child has a need for self-determination in the chosen type of activity, where he can feel himself the initiator and leader of his independent actions. There is no place for frustration of autonomy and strict parental control. However, when we talk about the degree of control of the parents of their disabled child, they should act, first of all, from the point of view of stimulating the child to achieve certain results, thus supporting all his initiatives.

At the same time, a child with disabilities as a self-organizing system, trying to meet their urgent needs, needs to ensure special integration with people who understand their educational and psychological needs. In this context, the educational process has a certain correctional orientation, when his existing abilities are revealed and developed through his inclusion in various activities (children's creativity, amateur art, sports, etc.). To do this, it becomes very important to determine the subjective quality of life of children with disabilities when they are diagnosed with psychosomatic disorders that reflect the characteristics of

their disease. All this is essential at all stages of their care: first diagnosis and then treatment and rehabilitation. Hence, the study of the specific features of the subjective quality of life of children with disabilities can be considered an adequate methodology aimed at determining the course of psychotherapy and conducting appropriate therapeutic and rehabilitation measures.

In this regard, a constant problem that concerns the situation of disabled children is the attitude towards them in society as “special” people. In this case, we are talking about the fact that children with disabilities are often not just unclaimed, but isolated from society; that is, they have become considered burdened with a burden on society, and hence an extremely narrow range of opportunities for their full inclusion in the cultural environment. Based on this provision, the following can be included in the specific features of the development of the subjective quality of life of children with disabilities:

- the destruction of the family as the main institution that really contributes to the social adaptation of disabled children;
- low level of well-being of the family where the disabled child lives;
- direct dependence of a disabled child on parents both at the economic and social level;
- low opportunities for a disabled child to fully participate in the socio-cultural life of society;
- limitation of educational opportunities at all levels;
- limited movement in the city, which creates one of the reasons for the isolation of a disabled child;
- the presence of constant emotional stress, leading to socio-psychological maladaptation, and hence to a decrease in the subjective quality of life of a disabled child;
- poor attention to the development of communication skills in a disabled child, as well as the formation of an active life position in him;
- low motivation of a disabled child to use his knowledge in practical life;
- the limited use of adaptive physical education to restore the lost physical abilities of the body in a disabled child;
- the absence of psychological measures (for example, socio-psychological support for the child during his self-organization of play or other activities), contributing to the creation of the most comfortable psychological environment for the life of a disabled child;
- ignoring cultural mechanisms aimed at increasing the dynamics of

- the internal growth of a disabled child and restoring his cultural status as a person during the rehabilitation of children with disabilities;
- frequent lack of special comfortable conditions for the development of personal resources and the formation of skills to overcome difficult life situations;
 - weakening of volitional activity in a disabled child due to illness, which leads to infantilism and inertia in behavior;
 - poor attention to cultivating in a disabled child the importance of his awareness of his own “I” and his comprehension in the course of later life in conditions of illness;
 - frequent lack of opportunities for subject-practical and play activities of a disabled child, which slows down the formation of higher mental functions in him;
 - delayed formation of the main structural components of personality (self-awareness, emotional-volitional sphere, level of claims; adequacy of response to a traumatic situation, etc.);
 - insufficient social and legal support for the full-fledged life of a disabled child;
 - the presence of tacit barriers in the exercise of the right of a disabled child to participate in the life of society;
 - there is a stereotype in society of the attitude towards children with disabilities as physically disabled people, etc.

We will also add here such social problems faced by children with disabilities as: the lack of systematic and targeted protection of their health; the prevalence of paid medical and educational services; the rarely encountered adaptability of the architectural and construction environment to the needs of disabled children in hospitals, schools and universities; the residual principle of state financing of the social sphere, where the interests of disabled children would be taken into account as much as possible; weak legislative framework for disabled children; lack of quality supervision of the work of officials on the implementation of the rights of disabled children, etc.

Summarizing the above, we note that the development of the subjective quality of life of children with disabilities is influenced by both the biological and social environment. If from the point of view of the social environment, a disabled child needs help from others, then the biological environment involves assistance in creating vital conditions to overcome the disease factor. Due to this and other factors, a disabled child has a low personal potential, which cannot be said about the potential of

a healthy child. Thus, the conditions created by the biological and social environment can both socialize a disabled child and resocialize him (the latter can lead to the destruction of social ties).

Usually a disabled child's resocialization occurs when his normal life activity is interrupted (for example, a serious illness prevents him from leading his former lifestyle). Based on this, in order to improve the subjective quality of life of children with disabilities, it is necessary to create conditions for their adequate socialization in a social environment [3]. Moreover the subjective quality of life of a disabled child should be considered in the form of a social process, which takes into account the characteristics of this child as a person, which determine the specifics of his life well-being. This is due to the fact that the personality of a disabled child is a product of social development, and he has to be included in the system of public relations through communication and activity. Hence, such a child will have a constant need for outside help, since it is often difficult for him to independently perform certain functions in the course of his life.

Here a step-by-step process of improving the subjective quality of life of a disabled child is important, which consists in the fact that the formation of the child's personality occurs first. Often it proceeds slowly due to weak identification of oneself in society and isolation of oneself in it due to illness. Further in order to achieve a high subjective quality of life for a disabled child it is necessary to create conditions which is usually carried out in various social institutions (family, school, medical institution, etc.). All this determines the specific features of the subjective quality of life of a disabled child, which, by definition, have all kinds of limitations that affect the characteristics of his personality. In this case, as a rule, the capabilities of the educational system and the social work organized within the walls of the educational institution play a very important role. At the same time, it is advisable to link the process of improving the quality of life of a disabled child with such factors as his needs and interests, value orientations, his socio-psychological characteristics, as well as the form of the disease and the course of the disease. All this together, one way or another, affects participation in events in which there is a mutual conditionality of the development of the subjective quality of life of a disabled child and the vicissitudes of the world around him. According to researchers, it is the "internal" sovereignty of the personality of a disabled child that contributes to the expansion of opportunities for his "self-mastery", which is important for realizing his own quality of life [6].

The need for psychological assistance to such a family is obvious, but the algorithm of interaction of psychological services with the family of a child with severe psychophysical pathology has not been developed to date, in practice, the interaction of the family with specialist psychologists is random and unsystematic. In addition to external factors, a significant role in the life of a family with a child with special needs is played by the dynamics of emotional problems caused by the birth and upbringing of such a child (frequent destruction of the family and the inability to further arrange their personal life, lack of positive experiences, guilt over the birth of a sick child, lack of prospects for themselves and fear for the future a child, a life in constant stress). To a greater extent, it is these problems that can lead to a distorted attitude towards the child, towards himself as a parent and unjustified disability, which accordingly leads to destructive interaction in society.

However, the reality is that a disabled child and the family in which he lives very often face such problems, where a solution to overcome them can be found only on the basis of state and public care. A special place among these problems is given to limited access to meeting the socio-cultural needs of a disabled child, in particular, when organizing leisure activities and introducing him to cultural values. While practice shows that it is thanks to the introduction of such a child to active activity with the help of various cultural and leisure institutions, there is, firstly, an opportunity to teach him to purposefully plan and further realize his interests; secondly, an opportunity to teach him to use his strength and knowledge rationally, taking into account individual abilities; in-third, the ability to discipline him, etc.

The main thing is to set up a disabled child to take the initiative in the field of his free time; then, when the situation changes, to reassess leisure activities and then to find an independent solution to the problem that has arisen. The purpose of this activity on the part of adults is to remove a disabled child from his static state, which often becomes a habit for him (to sit, doing nothing, and just look at the events happening around him). This problem is a significant factor affecting the formation of the child's psyche of a disabled child, since his behavior is very often determined by the degree of internal activity. And it often depends on the fact that he is aware of the low level of his life opportunities compared to healthy children. This, in turn, contributes to a decrease in self-esteem, which usually leads to a narrowing of the spectrum of claims. And hence - social passivity and reduced participation in

their living space. This circumstance creates in a disabled child a feeling of dependence on healthy members of society, which ultimately leads to addiction of dependency. In this regard, the problem of socialization of children with disabilities becomes extremely important, especially if it is associated with an increase in their subjective quality of life.

The expected social and practical effect can be divided into levels:

1. Improving the quality of life of disabled children and children raised in families with disabled children (will allow to activate the development and learning processes, while reducing the anxiety of all family members);
2. psychosocial support;
3. socialization and increasing tolerance towards people with disabilities through an inclusive approach,
4. creating the foundations for career guidance and development of disabled children, their socialization and integration into the collective and society.

Conclusion

Thus, in order to stabilize their emotional manifestations, improve contacts with others and gain confidence in their actions with such children, it is necessary to carry out the following work: expand the circle of communication for the child and on this basis form a communication culture for him; in every possible way encourage his desire for creative self-expression; to develop vital cognitive skills in a child (the ability and desire to learn, the ability to think outside the box, the ability to think logically, the ability to work with information, the skills of self-organization of their activities, spatial thinking and imagination, etc.); to increase the child's self-esteem of his personality; to introduce him to the active life of society, etc. In order to manage this process more effectively, it is necessary to clearly understand what the specific features of the subjective quality of life of children with disabilities are, to identify positive and negative personal qualities of a disabled child, and hence to anticipate the results of the impact of a rehabilitative nature and make timely adjustments.

At the same time, it is important to understand that the limitation in health opportunities is not a quantitative factor. This is, as a rule, a systemic change in the personality of sick children, which should generate appropriate psychological and pedagogical support and constant monitoring of the characteristics of this particular child. This is due to the fact that the presence of certain defects regarding his health leaves

a certain imprint on the formation of his higher mental functions that determine the success of his socialization and communication with the social environment.

References

1. Baranov AA, Al'bickij VY. Sostoyanie zdorov'ya detej Rossii, prioritety ego sohraneniya i ukrepleniya // Kazanskij medicinskij zhurnal. 2018;4:698-705.
2. Baranov AA, Al'bickij VY, Modestov AA, Kosova SA, Bondar' VI, Volkov IM; Baranova AA (ed.). Zabolevaemost' detskogo naseleniya Rossii. Moscow: Pediatr"; 2013. 310 s.
3. Batueva SV. Destruktivnye psihologicheskie zashchity lichnosti, kak indikator neblagopoluchiya social'noj sredy. Vestnik soveta molodyh uchyonyh i specialistov CHelyabinskoy oblasti. 2016;2(1/12):36-41.
4. Orel VI. Mediko-social'nye i organizacionnye problemy formirovaniya zdorov'ya detej v sovremennyh usloviyah. avtoref. dis. ... dokt. med. nauk. SPb., 1998. 66 s.
5. SHashel' VA, Levin PV, Trubilina MM, SHadrina EM, Lupash NG. Sostoyanie zdorov'ya detej kak mediko-social'naya problema. Mezhdunarodnyj zhurnal eksperimental'nogo obrazovaniya. 2013;4:321-324.
6. Timofeeva IV. Rebenok s ogranichennymi vozmozhnostyami zdorov'ya kak sub"ekt zhiznedeyatel'nosti: k postanovke problemy [Elektronnyj resurs]. Medicinskaya psihologiya v Rossii: elektron.nauch.zhurn. 2011;2. Available from: http://www.medpsy.ru/mprj/archiv_global/2011_2_7/nomer/nomer12.php
7. Vaganov HH. Mediko-organizacionnye problemy ohrany materinstva i detstva. Moscow: ProMedia; 2001. 224 s.



FEATURES OF FORMATION OF LIFE COMPETENCIES IN JUNIOR SCHOOLCHILDREN WITH INTELLECTUAL DISABILITIES

Elena Borisova, Irina Kozina

Abstract: The article considers the problem of the life competencies formation in students with mental retardation studying in various educational institutions such as special schools and secondary schools in conditions of inclusive education. The formation of the component of life competencies is one of the most important tasks of the modern education system for children with disabilities. The article demonstrates the data of an empirical study of the socialization features and the formation of life competencies in junior schoolchildren aged 8-11 years with intellectual disabilities, studying in conditions of inclusive and special education. The empirical study used a set of diagnostic methods, both test and expert. The results analysis made it possible to identify general and specific characteristics due to the interaction of psychopathological and environmental factors and to determine the need for special remedial and developmental work when teaching children with intellectual disabilities in conditions of inclusion. The approbation results of psychological and pedagogical support model for junior schoolchildren with intellectual disabilities revealed the importance of the defect structure in determining the directions of remedial and developmental work and the need for cooperation of all subjects of the educational environment in creating conditions for the successful socialization of children with intellectual disabilities studying in conditions of inclusion.

Keywords: life competencies, socialization, students with intellectual disabilities, inclusive education.

Introduction

Formation of the life competence of elementary school children with intellectual disabilities is an urgent problem of modern education in connection with the implementation of federal educational standards for students with mental retardation and the expansion of an inclusive approach to teaching people with disabilities.

Modern educational standards and adapted educational programs for children with special educational needs determine the need for them to form not only and not so much a knowledge system as the social competence, which is a necessary condition for integration into society [1; 2]. Therefore, modern normative documents provide for the formation of not only a system of knowledge, experience of activities and relationships in schoolchildren, but also social competence, which is a necessary condition for the integration of these schoolchildren into

society. We can consider the state of life competence sphere which “ensures the development of relations with the environment in the present” [3; 16], as the most important indicator of psychosocial development, the acquisition of social competence, despite the variety of approaches to determining its structure [4; 5; 6].

Various studies insufficiently reflect problems of the social competence formation in children with intellectual disabilities [7; 8]. Vital competencies are of paramount importance to improve the quality of life of a child with mental retardation. Life competencies are those skills, knowledge and abilities, as well as the methods of their application, which are necessary for a person for the maximum possible independent functioning [9; 10; 11].

As part of the development of the Concept of a special educational standard for children with disabilities determined the necessary areas of correctional assistance in the field of life competence common to all children with developmental disabilities. These areas form the structure of the Correctional Work Program supplementing the basic general educational program. They are implemented by a teacher and additionally attracted specialists (education psychologist, teacher-speech pathologist, teacher-logopedist, social teacher). Despite the fact that the areas of corrective assistance for all categories of children with disabilities are the same, the content of work with each of them has a pronounced specificity. [12]

Considering the current situation, researchers note both the importance of the adopted standards, state programmes and plans for the development of inclusive education, and the complexity of their implementation, emphasizing the gap between goals and opportunities [13; 14]. The issues of determining the content of corrective work on the accumulation of positive social experience by a child and the acquisition of vital competencies in relation to mentally retarded children entering secondary school are currently insufficiently developed.

Many researchers note that success in the psychosocial and social development of a child with intellectual disabilities is much easier to achieve in the system of special education, motivating this by the need to organize special corrective work in a comprehensive school [15].

In this regard, it is relevant to study the factors and conditions that determine the success of inclusive processes, as well as the development of forms and methods of remedial work for the development of social competencies among students.

Methods

A comparative analysis of the social competence development features in elementary school children with intellectual disabilities studying in different conditions was carried out. It was conducted in the framework of a study with support of the Russian Foundation for Basic Research (RFBR) in order to identify factors that determine the success of socialization.

The study sample consisted of 90 junior schoolchildren at the age of 8–11 years old, studying in the conditions of inclusive and education. The subjects included children with mild mental retardation, as well as with moderate mental retardation and severe multiple developmental disorders. The study also involved the parents of pupils and representatives of teaching staff in the amount of 29 people: 13 teachers of general education schools and 16 teachers of special schools in which children with intellectual disabilities study.

The diagnostic program included the following techniques: “map of observations” by D. Stott, scale of social competence (A. M. Prikhozhan), the method of “Ladder” by V. Shchur, the Wechsler Intelligence Scale for Children (WISC), the individual neuropsychological tests and diagnostic system of L. F. Fatihova (emotion recognition) [16].

Results and discussion

The social competence research showed that less noticeable manifestations of social maladjustment and more harmonious intrafamilial relations are characteristic for children studying in the inclusive educational environment, in comparison with their peers who are pupils of special schools. However, there are difficulties in recognizing emotional states of other people, inadequate ability to properly deal with typical real-life situations. Contradictory tendencies in the formation of self-image and a number of other negative features of psychosocial development, presumably due to the specificity of the social experience are noted [17]. Against the background of the generally insufficient level of formation of all social competence components in both groups, more common difficulties for students in the inclusive educational environment attract the attention. These difficulties are constrained expression of various emotional states, insufficient emotional flexibility and a tendency to show compassion, less pronounced positive reactions to joint games with the predominance of good mood, more relaxed behavior in conflict situations, less pronounced physical and verbal aggression. The revealed features reflect the presence of both positive and negative

tendencies in the development of the social competence in various educational conditions and determine the need for targeted special work taking into account the combination of psychopathological and environmental factors [12].

In our study, we used the “Life Competency Assessment Sheet” [18] which includes the following blocks: self-care skills, personal security and decision-making skills, household skills, social skills, home leisure organization skills and al. to assess the level of the life competencies formation of a student with mental retardation.

Almost all the children participating in the study showed sufficiently developed self-care skills [19].

When assessing the unit of personal security skills and making decisions, significant differences were found in the analysis of data indicating how much the child can determine and / or use the source of help. The skill is fully formed in 30% of the subjects studying in the inclusive educational environment, and the percentage is 20.4% among students in the conditions of special education. In 78.9% of these children, the skill is partially formed. In special education, there were no children with the absent skill. In the inclusive group, there are 15% of such children.

About half (55%) of mass school children can identify alternatives when making decisions, in special education there are 20.4% of such children. This demonstrates possibility of more complex forms of behavior for mass school children in difficult situations and decision-making in various domestic situations.

The use of coping strategies of behavior is formed in 55% of the children of the mass school, only 15.1% of these are observed in the special school. However, a significant part of the pupils of a special school (79.2%) tries to use coping strategies with the help of an adult. Approximately equal number (5.7% and 5%) of children do not know how to use coping strategies in difficult life situations. The skill to express refusal in an acceptable form is confidently formed in 35% of children in the inclusive form of education; this skill is in the process of formation in the majority (94.3%) of pupils of the special school. A similar picture is observed in the analysis of the ability to get out of conflict situations in a socially acceptable way [20].

A significant part of the children of the mass school (60%) did not learn how to behave in public places; a smaller number (35.8%) represents students of the special school in this group. A similar ratio is

observed in a subgroup of children with partially formed behavior skills in socially significant places: 30% of mass school children and 62.3% of special school children. However, 10% of children showed a practically formed skill of such behavior among children of the inclusive form of education. There are much fewer children of another form of education in this subgroup (1.9%).

Both general, due to the structure of the defect, and specific characteristics of the social competence of primary schoolchildren studying in different conditions were highlighted. Based on the results, the conclusion is made about the importance of special correctional and developmental work in teaching mentally retarded school students in the inclusive educational environment, aimed at creating the conditions necessary for the successful socialization of a child with disabilities

The conceptual model of psychological and pedagogical support of students in the inclusive educational environment includes the implementation of special (training), advisory and preventive activities in relation to various participants in the educational environment. The necessity of both correctional and pedagogical work aimed at solving the problems of social adaptation, and the obligatory organization of psychological and pedagogical counselling support for students in the inclusive educational environment is determined. An important task is not only remedial work aimed at overcoming identified shortcomings, but also the organization of the inclusive educational space, including all subjects of the educational environment.

In remedial work, in addition to the recommendations of scientists from the Institute of Correctional Pedagogy of the Russian Academy of Education, the methodological developments of V.V. Voronkova, Zh.M. Glozman and others were used. Game methods and techniques allow the teacher to educate children with mental retardation in a more accessible and attractive form for them.

To achieve significant results of experimental training, its tasks were defined. After the initial diagnosis, it was revealed that social and communication skills, as well as skills necessary for integration into the school environment suffer more in children with intellectual disabilities. Based on these data, the following tasks of the formative stage of the study were formulated: activation of socially acceptable forms of behavior in society, orientation skills in social situations, ability to collective actions in schoolchildren, development of interpersonal communication skills and skills of interaction with peers and adults, formation

and consolidation of skills of compliance with the rules adopted in the classroom.

Testing of the model was carried out on the base of educational organizations, the main selection criteria of which were differences in the conditions of teaching children with intellectual disabilities (full inclusion, partial inclusion, special education). In total, 7 educational organizations were involved. The following groups represent the survey sample: group 1 - students of a special remedial boarding school, group 2 - students in an ungraded remedial class on the base of a comprehensive school, group 3 - students in homeschooling with partial comprehensive school attendance (remedial classes).

It is advisable to analyze the degree of the studied indicators shifts in the selected groups to assess the impact of learning conditions on the success of socialization. It was assumed that immersion in a more complex social environment would create more favorable conditions for the formation of individual components of the social competence among students in the general education school; however, the tendencies identified during the study are ambiguous. The positive dynamics in most indicators turned out to be more characteristic for students of the special school. The only exceptions are a few parameters of the development of an arbitrary component of activity: the improved results of neuropsychological tests were observed mainly among students in inclusion conditions.

A comparison of the results obtained in two groups of students on the base of general schools is the most interesting. The remedial class seems more promising in the context of socialization because in this case, children are in an environment created in accordance with their special educational needs, while they are included in the educational and pedagogic space of the comprehensive school and have the opportunity to communicate with their normatively developing peers. The analysis of the results reflects a more pronounced positive dynamics in the development of the ability to determine the emotional states of people, including in educational interaction, characteristic for students of the group 2. They more often understand the degree of adequacy of the emotional state experienced by the character in the situation in which he is ($p=0.08$), correctly name emotions and suggest the causes of experienced conditions ($p=0.05$). The development of the ability to understand the inner world of other people, the ability to decentration, and the ability to predict the reaction of others to their actions is an important condition for harmonious interaction with society.

Students in the remedial class, in contrast to their peers mainly studying at home, have a more pronounced tendency to harmonize self-esteem on such scales as “healthy - sick” (improvement in 40% of subjects of the group 2 and 14% of the group 3) and “a good student - a bad student” (45% and 16%, respectively), which is probably a reflection of the psychological atmosphere and the sufficient tolerance of the environment at school. It is interesting that the increase in self-esteem on the scales “smart - stupid” and “skillful - unskillful” turned out to be more typical for students studying at home. In this group, improvements were observed in more than half of the students (57%), which can be explained by the individualization of the program and the grading system used by the teacher. It is important to note that according to the parameter “have friends - no friends”, negative changes prevail in both groups.

The sample of subjects studying in the specialized boarding school showed more pronounced positive changes after the formative programme implementation. The results revealed an increase in indicators characterizing the following skills: helps others ($p=0.014$), observes safety rules in joint games ($p=0.014$), acts together with other children ($p=0.046$), avoids disputes ($p=0.025$), accepts sports rules ($p=0.025$), expresses both negative and positive feelings in an acceptable way ($p=0.008$).

Children studying in the conditions of inclusive education also demonstrated positive dynamics in the formation of life competencies, but its manifestations were less pronounced. Thus, among such students, there was an improvement (at the level of $p<0.05$) of the following indicators: plays with other children, uses coping strategies if he is anxious, upset, angry, too excited or cannot control himself, and also adequately responds to the feelings and actions of others.

Schoolchildren, who studied mainly in home-based learning conditions with some separate remedial classes, did not show significant dynamics in any of the selected indicators.

Conclusions

Thus, according to the study results of the features of the life competencies formation in children of elementary school age with mental retardation, we can state the following:

1. There are significant differences in indicators of the process of the life competencies formation in children with intellectual disabilities studying in different learning conditions (inclusive education, special education).

2. Self-care skills and other domestic skills in children with mild mental retardation are quite well-formed.

3. In the subgroup of the life competencies designated in our study as “social skills”, significant differences between pupils of different forms of education are manifested, as a rule, in the fact that skills are in the process of formation in a significant number of pupils in the special school and do not meet characteristics of self-use at this stage.

The tendencies identified in the research process can be explained by the fact that life competencies are a multicomponent education, which includes a set of knowledge and ideas of the child about objects and phenomena of the surrounding reality and about how to deal with them; the skills in practical and operational application of the acquired knowledge in solving specific life tasks; the experience in using acquired knowledge and skills in everyday life; the ability to expand knowledge and the formation of new skills. Therefore, the development of social competence as a condition for successful socialization requires coordinated work aimed at solving problems connected to the formation of cognitive, activity and reflective components. In addition to special and developing work with children and counseling parents, the obtained results confirm the need for organization of joint activities of students, training and advisory support of teachers on the formation of children’s experience in communication, cooperation in simulated situations of social experience, both in extracurricular and in classroom activities.

References

1. Ministry of Education and Science of 19/12/2014 no 1598 “On approval of the federal state educational standard of primary education of students with disabilities”.
2. Ministry of Education and Science of 19/12/2014 no 1599 “On approval of the federal state educational standard of education of students with intellectual disabilities”.
3. Malofeev NN, Nikolskaya OS, Kukushkina OI, Goncharova EL. Integrated Concept of Federal State Standard of General Education of Children with Special Needs: Primary Concepts. *Defectology*. 2010;1:6-22.
4. Kalinina NV. Formation of social competence as a mechanism for strengthening the mental health of the younger generation. *Psychological Science and Education*. 2001;4:16-21.
5. Khaustov AV. Special educational needs of students with autism spectrum disorders. *Autism and Developmental Disorders*. 2016;14(2):3-12.

6. Chebotova MA, Zarin A, Il'ina SYu. Social competence of first-graders with intellectual disabilities. *Special education*. 2016;4:59-66.
7. Sherbakova AM, Moskolenko NV. Formation of social competence in high school students of special educational institutions of VIII type. *Defectology*. 2001;3:19-34.
8. Serova VV. Psychological features of the development of social competence in older preschoolers with mild forms of mental underdevelopment - pupils of the orphanage. *Avtoref... dis of PhD in Psychology*: 19.00.10. Nizhniy Novgorod; 2008. 23 p.
9. Babkina NV. Life competencies as an integral component of the content of education of children with a delay in mental development. *Clinical Psychology and Special Education*. 2017; 6:138-156. DOI: <https://doi.org/10.17759/cpse.2017060109>
10. Bulanova NO. The concept of "life competence" for persons with intellectual disabilities. *Young scientist*. 2017;25:278-280. Available from: <https://moluch.ru/archive/159/44824>
11. Smirnova VYu. Tasks of social development of children with impaired intelligence, brought up in conditions of inclusion. *Young scientist*. 2017;21:445-450. Available from: <https://moluch.ru/archive/155/43809>
12. Borisova EY. Social competence of elementary school children with intellectual disabilities who study in special and inclusive education. *Proceedings of the I all-Russian scientific and practical conference with international participation: Innovative methods of diagnostics, treatment and rehabilitation of children and adolescents with developmental disorders*. Moscow; 2020. p.31-37.
13. Alekhina SV. Inclusive Education: from Policy to Practice. *Psychological Science and Education*. 2016;21 (1):136-145. DOI: <https://doi.org/10.17759/pse.2016210112>
14. Alekhina SV. Psychopedagogical foundations of inclusive education. Moscow: MGPPU, OOO «Buki Vedi»; 2013. 334 p.
15. Indenbaum EL. Psychosocial development of adolescents with mild intellectual disability. *Psychological science and education*. 2010;2:73-80.
16. Fatikhova LF. Diagnostic complex for psychological and pedagogical examination of children with intellectual disabilities. Ufa: the Ufa filiation of Sholokhov Moscow State University for Humanities; 2011. 80 p.
17. Borisova EY, Kozina IB, Danilova OV, Koryakova EV. Features of socialization of children with intellectual disabilities in different learning environment. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018 - Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth*. Seville; 2018. p.7642-7646.

18. Manelis NG., Aksenova EI, Bogorad PL, Donbass NN, Zagumennaya OV, Kalabukhova AA, et al. Formation of life competencies in students with autism spectrum disorders. Methodological manual. Moscow. 2016. 57 p.
19. Kozina IB. Formation of life competencies in students of primary school age with intellectual disabilities using game methods. Proceedings of the All-Russian Scientific and Practical Conference: Topical issues of social pedagogy and psychology: theory and practice. Cheboksary; 2019. p.104-108.
20. Kozina IB. Features of the formation of social skills in children of primary school age with intellectual disabilities, brought up in different forms of education. The Scientific Heritage. 2019;4(42):12-15.



FACILITATION OF THE DYNAMICS OF SOCIAL INTERACTION SKILLS DEVELOPMENT IN PRESCHOOL CHILDREN WITH AUTISM SPECTRUM DISORDER

Veronika Vasina, Elvira Sadretdinova, Irina Nigmatullina

Abstract

Research problem. The increase in the number of children with autism spectrum disorder has exacerbated the problem of improving (facilitating) social interaction skills in preschoolers. This category of children is characterized by a combination of qualitative disorders, where one of the main manifestations is difficulties in verbal and social behavior.

The aim is dynamics research of the development of social interaction skills in preschoolers with autism spectrum disorder, depending on gender and age, to determine the points of facilitation, to give recommendations.

Research methods. On the basis of ontological and behavioral approaches, theoretical methods of analysis of philosophical, psychological and pedagogical literature are used, among the empirical methods-the Sandberg M. VB-MAPP method (2008), observations, qualitative analysis, Student's T-test. A longitudinal study (2018-2022) for 54 preschool children with autism spectrum disorder from different kindergartens in Kazan is presented.

Conclusions. The results obtained confirm the general population data on the greater number of boys with autism spectrum disorder and gender differences in the social behavior of children with ASD, 11% of girls and 89% of boys in the sample. The strengths of the respondents were found: a) visual perception, b) echo skill, c) group behavior. Noted weaknesses: a) request b) social skills, in) intraverbal properties. The girls of the sample have higher linguistic skills in naming and listening, while the boys have better visual perception. The dynamics of the development of skills of children with ASD during the longitudinal study is minimal, inconsistent, and does not depend so much on age as on the complexity of the defect.

Keywords: facilitation, social interaction, non-directive management, dynamics, development of communication skills, preschool children, autism spectrum disorder.

Introduction

The relevance of the research is that there is currently a tendency to increase the number of children with autism spectrum disorder (ASD), which has exacerbated the problem of improving (facilitating) social interaction skills in such preschoolers [1]. This category of children is characterized by a combination of qualitative disorders, where one of

the main manifestations is difficulties in developing communication skills [2]. Timely diagnostic examinations and remedial care for children with autism spectrum disorder can reduce or completely eliminate communication disorders, thereby ensuring further successful interaction with peers and adults [3].

But before we talk about targeted correction, it is necessary to track the dynamics of this skill, i.e. to describe the facilitation of the dynamics of the development of social interaction skills in preschoolers with autism spectrum disorder, which determined the relevance of this research.

Purpose and objectives of the study

It is necessary to research the dynamics of the development of social interaction skills in preschoolers with autism spectrum disorder, depending on gender and age, to determine the points of facilitation, to give recommendations for building a comprehensive program of accompanying children in a kindergarten for autistic children of Kazan Federal University.

Literature review

An analysis of the scientific literature has shown that timely diagnostic examination and correctional care for children with autism spectrum disorder can reduce or completely eliminate communication disorders, thereby ensuring further successful interaction with peers and adults [4;5;6;7]. The main and main task of specialists is to develop the ability of children with ASD to master functional speech, teach them social ways of communication and develop their ability to use verbal and non-verbal means of communication in the process of positive reinforcement [8;9]. The dynamics of the development of communication skills is determined by the facilitation of social interaction – non-directive management, assistance, assistance to children with ASD (monitoring the dynamics, improving the dynamics).

Many researchers and scientists have focused on the issue of verbal behavior and social interaction, and behavioral analysts have focused on the sources and variables that control the functioning of language as a pure behavior [10; 11; 12]. Speech as behavior in applied behavior analysis has been studied for more than half a century. B. F. Skinner (1957), M. L. Sundberg (2008) and other psychologists have emphasized that the environment contains an infinite number of nonverbal stimuli and complex multiple relationships, and in the absence or insufficient formation of verbal actions, the use of conditional signs can be

limited [13]. Violation of interaction with others is clearly manifested in the violation of the communicative function of speech in children with autism spectrum disorder. Children with autistic disorders rarely ask questions to the interlocutor, most often do not give an answer to questions addressed to them, or can answer in monosyllables. But at the same time, this category of children may have developed “autonomous speech”, a conversation with themselves, depending on their age [14].

Facilitation of long-term dynamics is necessary, because often these children may have delayed verbatim reproduction of previously heard things in life, there are pathological speech forms: delayed and immediate speech echolalia, chanted pronunciation, unusual drawl intonation, neologisms [15]. Conversational skills are most preserved in Asperger’s syndrome in children with autism spectrum disorder [16].

Psychologists have paid great attention to the importance of verbal behavior in the formation of behavior in general, especially in children at an early stage of speech and communication development [17; 18; 19]. They include all verbal actions – speech, reading, writing, a child with ASD learns to speak due to the influence of various verbal stimuli and reinforcers, especially when the spatial-temporal elements of the anticipatory coherence of children with general speech delay are disturbed [20]. In his research, B. F. Skinner (1957) paid great attention to working with children with ASD and made a great contribution to the development of the method of analyzing verbal behavior and applied behavior analysis in general. One of the most significant and serious results of his research is the classification of types of verbal behavior (The Behavioral Classification of Language). This classification describes nine types of verbal behavior, according to which a child with ASD can effectively interact and communicate, provided that he learns to use words within each type, which helped Sandberg M. create the diagnostic toolkit VB-MAPP (2013).

Methodology

Based on the ontological and behavioral approaches, the author’s concept of facilitating social interaction in the longitudinal researches (2018-2020), theoretical methods of analyzing philosophical, psychological and pedagogical literature are used; among the empirical methods are the Sandberg M. VB-MAPP method (2013), observations, qualitative analysis, and the Student’s T-test. The experimental base of the study is 54 preschool children with autism spectrum disorder from different kindergartens in Kazan (Russia).

Results

Within the framework of the ontological approach, we have determined that the facilitation of social interaction is the building of the process of effective communication by changing the representations of the subjects of interaction in the presence of an observer. The behavioral approach has led to the understanding that facilitating the dynamics of social interaction skills development in preschoolers with autism spectrum disorder is a process of observing changes in behavior, improving communication, and creating a new complex system of intervention that does not reduce to the sum of the previous ones (2018-2020). Preschool boys with ASD in different kindergartens in Kazan (Russia) More girls were identified than girls, which is consistent with a systematic review of studies and confirms the general population data on a greater number of boys with autism spectrum disorder and gender differences in the social behavior of children with ASD. Girls - 11%, boys – 89% were found in the sample. Due to the small number of girls with ASD surveyed, the results of the sample on average coincide with the results of boys with ASD.

When researchs the dynamics of the development of verbal and social interaction skills in different samples of preschool children with autism spectrum disorder in a longitudinal study, using the methodology developed on the basis of the analysis of verbal behavior by B. F. Skinner VB-MAPP Sandberg M. (2013), the strengths of the respondents were found: a) visual perception, b) echo skill, c) group behavior. Weaknesses are noted: a) requests, b) social skills, c) introverbal properties. The girls of the sample have higher linguistic skills in naming and listening, while the boys have better visual perception. The request skills and introverbal skills were the least developed during the year.

The analysis of the results of children with ASD by age was carried out. Due to the uneven development of children with ASD, it is impossible to clearly divide them into age-related communication groups: in one of the skills, a child may meet the age norm (or even be ahead of it), but lag far behind in others, and due to this, a simple calculation of the total number of points in the test is not indicative and cannot act as an objective assessment. A highly functional child of a younger age may be better developed and socialized than an older preschooler, which was confirmed in 2018, 2019 and 2020. The children grew, but did not level out. The dynamics of the development of skills of children with ASD during the year of longitudinal study is minimal, inconsistent and does

not depend so much on age as on the complexity of the defect, the second year of research did not bring any qualitative changes. The Student's T-test shows no significant differences between the results of different years.

70% of respondents with ASD at the control stage of 2020 still cannot interpret the facial expressions and views of other people, and have difficulty expressing their own emotions. Thus, in children with autism spectrum disorder, violations of almost all mental processes are observed, which is expressed in the features of the emotional-volitional sphere, verbal and non-verbal behavior, social relationships and affects their development, adaptation and life activity in general. With specially directed training, some children with autism spectrum disorder have mastered a small amount of gestures in 2 years, much less than in other preschoolers, but spontaneous use is almost inaccessible to them. In severe forms of this disorder, there is a total absence of visual contact, gestures and facial expressions, which smooths out the results presented in average values, since individual children have reached a maximum of 5 points by 2020. But these are units and each has only one separate scale (1 skill). But if in 2018 there were no children in this sample with a high level of development of communication skills (the children were young), then by 2020 there were 8% of such children (the children grew up and received some general and correctional development). Due to this, the number of children with a low level of communication development decreases from 54% to 48%, and from the middle level there was a transition to a high level.

Facilitation of the dynamics of the development of social interaction skills in preschoolers with autism spectrum disorder showed in a longitudinal researches (2018-2022) that the main and main task of specialists is to form the ability of children with ASD to master functional speech, teach them social ways of communication and develop their ability to use verbal and non-verbal means of communication in the process of positive reinforcement. The development of speech can occur at different times, but regardless of this, even after a year of correctional work, most children with ASD have violations of the formation of speech utterance and insufficient formation of the communicative function of speech.

The results confirm the general population data on the higher number of boys with autism spectrum disorder and gender differences in the social behavior of children with ASD. The strengths of the respondents

were found: a) visual perception, b) echo skill, c) group behavior. Weaknesses are noted: a) requests, b) social skills, c) introverbal properties. The girls of the sample have higher linguistic skills in naming and listening, while the boys have better visual perception. The least developed were the request skills and introverbal skills. Due to the uneven development of children with ASD, it is impossible to clearly divide them into age-related communication groups: in one of the skills, a child may meet the age norm (or even be ahead of it), but lag far behind in others, and due to this, a simple calculation of the total number of points in the test is not indicative and cannot act as an objective assessment. Facilitation of the dynamics of the development of skills of children with ASD during the longitudinal study showed that the changes are minimal, inconsistent, and not so much depend on age as on the complexity of the defect. A highly functional child of a younger age may be better developed and socialized than an older preschooler, which was confirmed in 2018-2022. The children grew, but did not level out.

Discussion

There are still questions for further research.

1. Probably, needs a comprehensive remedial program to support children with autism or structural - functional model [21].
2. Considering the psychological characteristics of subjects who required long duration of the classes for a more visual changes in the level of social interaction and timely assessment of the quality of preschool education of children with autism [22].
3. If you spend with these children enough time to regularly and systematically deal with them, the development of an autistic child can be as close as possible to the development of peers, especially when you have a good mediator – facilitator of social interaction [1].
4. As the prospects of the research should indicate whether a quantitative increase of the sample divided by age and gender of the respondents.

Conclusion

Facilitation of the dynamics of the development of social interaction skills in preschoolers with autism spectrum disorder showed that it is necessary to monitor individual changes in each child, since the average values for the group do not show personal progress. The results of the research can be used in the practical activities of speech pathologists-facilitators. The data obtained are a good basis for various types of assistance measures in building effective communications, for developing

programs for socio-psychological correction, socialization and adaptation of children with ASD, for clarifying the adapted basic educational program of preschool education, for building a model of comprehensive support for preschool children with autism spectrum disorders.

The basis for the development of modern educational and medical technologies in teaching preschool children with autism spectrum disorders on the topic of scientific research included in the plans of scientific works of scientific and educational organizations of higher education that carry out scientific research at the expense of the federal budget is studied.

This paper has been supported by the Kazan Federal University Strategic Academic Leadership Program» (PRIORITY-2030) and within the framework of the federal innovation platform “Predictive ability of preschoolers with autism spectrum disorder as a socialization resource: a detection model”.

References

1. Vasina VV. Facilitation of the Dynamics of Social Interaction Skills Development in Preschool Children with Autism Spectrum Disorder. International Journal of Social Sciences Perspectives; 2022;11(1):23-27. DOI: <https://doi.org/10.33094/ijssp.v11i1.627>
2. Vakhrusheva AV, Vasina VV. Studying verbal behavior in younger schoolchildren with autistic spectrum disorder. International Scientific journal School of Science, 2020;11(36):1-9.
3. Warreyn P, van der Paelt S, Roeyers H. Social-communicative abilities as treatment goals for preschool children with autism spectrum disorder: the importance of imitation, joint attention, and play. Developmental Medicine & Child Neurology. 2014;56(8):712-716.
4. Schramm R. Children's autism and ABA: therapy based on methods of applied behavior analysis. In: Izmailova-Kamar S. Anisimov S (Ed.). Yekaterinburg: Rama Publishing; 2013. 208 p.
5. Orlova EA. Method of analysis of verbal behavior in teaching and psychological support of children with autistic spectrum disorders. MNKO; 2016. p. 2-57.
6. Accardo AL. Research synthesis: Effective practices for improving the reading comprehension of students with autism spectrum disorder. DADD Online Journal. 2015;2(1):7-20.
7. Carnahan C, Musti-Rao S, Bailey J. Promoting active engagement in small group learning experiences for students with autism and significant learning needs. Education and Treatment of Children. 2009;32(1):37-61.
8. Atkinson L, Slade L, Powell D, Levy JP. Theory of mind in emerging reading comprehension: A longitudinal study of early indirect and direct effects. Journal of Experimental Child Psychology. 2017;164:225-238.

9. Shumway S, Wetherby AM. Communicative Acts of Children with Autism Spectrum Disorders in the Second Year of Life. *Journal of Speech, Language, and Hearing Research*. 2009;52(5):1139-1156.
10. Cook BG, Tankersley M, Landrum TJ. Evidence-based practices in learning and behavioral disabilities: The search for effective instruction. In: Cook BG. *Evidence-based practices*. Bingley: Publ. Emerald Group Publishing; 2013. p. 1-19.
11. Fedorov AA. The Evolution of the Units of Behavior Analysis within Behaviorism: Watson, Kantor, Skinner. *Bulletin of the Novosibirsk State University. Series: Psychology*. 2010;4(1):19-27.
12. Sviridenko IA, Ermakova AK. Diagnosis of communicative skills of children with autism spectrum disorder. *Fundamental and applied scientific research: topical issues, achievements and innovations. Collection of the XXIII International Scientific and Practical Conference: Part 3. Penza: ICNS "Science and Education"; 2019. p. 152-154.*
13. Thurm A, Lord C, Lee L-C, Newschaffer C. Predictors of language acquisition in preschool children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*. 2007;37:1721-1734.
14. Nikolskaya OS, Baenskaya ER, Liebling MM. *Autistic child: Ways of help*. Moscow: Terevinf; 2007. 288 p.
15. Kuleshova II. On the question of the application of VB-MAPP technology in the process of psychological and pedagogical study of preschool children with autistic spectrum disorders (ASD). *Correctional pedagogy: theory and practice*. 2015; 2(64):57-60.
16. Drew A, Baird G, Taylor E, Milne E, Charman T. The social communication assessment for toddlers with autism (SCATA): An instrument to measure the frequency, form and function of communication in toddlers with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. 2007;37:648-666.
17. Cain K, Oakhill J, Bryant P. Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology*. 2004;96(1):31-42.
18. Akhmetzyanova AI. The theoretical analysis of views on anticipatory function of mental reflection development. *International Electronic Journal of Mathematics Education*. 2016;11(4):683-694.
19. Dosshe DM. Catatonia and autistic spectrum disorders: diagnostics, therapy and clinical science. *Autism and developmental disorders*. 2019;17(1):24-35.
20. Akhmetzyanova AI. Spatial and temporal elements of anticipation consistency of children with general speech retardation. *American Journal of Applied Sciences*. 2014;11(7):1031-1035.
21. Nigmatullina IA, Tvardovskaya AA. Support for children with autism: a structural and functional model. *Proceedings of the International Scientific Conference "Far East Con" (ISCFEC 2020)*. p. 2197-2202. DOI: <https://doi.org/10.2991/aebmr.k.200312.305>

22. Nigmatullina IA, Dadakina VJ. Quality Assessment of Preschool Education of Children with Autism. Proceedings of the International Scientific Conference "Far East Con" (ISCFEC 2020). p. 2050-2055. DOI: <https://doi.org/10.2991/aebmr.k.200312.285>
23. Skinner BF. Verbal Behavior. Action, MA: Copley Publishing Group; 1991. 478 p.
24. Sundberg M. Manual. Program for assessing speech and social interaction skills for children with autism and other developmental disorders. Rishon Lezion: MEDIAL; 2008. 275 p.
25. Sundberg M. VB-MAPP. Assessment of milestones in the development of verbal behavior and the construction of an individual intervention plan. Protocol. Rishon Lezion: MEDIAL; 2013. 108 p.
26. Sibgatullina-Denis I., Teriaeva-Maerz L., Sadretdinova E. Resonance co-creation of time and meaning of European informal pedagogy. In: Sibgatullina-Denis I, P Max Hacker S, Vančová A, Kirsha A, editors. Sustainability of Science in a Post-Covid World: Monograph [Internet]. Vienna: IfII Institut für Intellektuelle Integration; 2021 [cited 2021 Dec 1]. p. 49-52.
27. Vanchova A, Sibgatullina-Denis I. Raznoobrazie i benchmarking inklyuzii. Cheboksary: ID «Sreda»; 2021. 208 p.



PROBLEME DER INTEGRATIONSERZIEHUNG UND DES DEUTSCHUNTERRICHTS (AM BEISPIEL ÖSTERREICHS)

Mag. Lina Embacher

Abstrakt. In dieser Studie wird hervorgehoben, dass die Österreicher bei der Planung und Umsetzung von Reformen ihre eigenen Interessen in den Vordergrund stellten und erst in zweiter Linie externe europäische Trends berücksichtigten. Die für die österreichische Bildungspraxis typische Methode der “kleinen Schritte” wird untersucht.

Die wichtigsten Etappen der Entstehung und Entwicklung des Hochschulwesens der Republik Österreich werden analysiert. Es wird festgestellt, dass die europäischen Staats- und Regierungschefs eine neue Strategie zur Förderung der Qualität der Pflichtschul- und Hochschulbildung beschlossen haben. Ein wichtiges Element dabei ist die Ausweitung der Abdeckung junger Menschen mit berufsorientierter Hochschulbildung. Bildung sollte die Voraussetzungen für die Bildung einer freien Persönlichkeit schaffen, für das Verständnis anderer Menschen, für die Gestaltung des Denkens, der Kommunikation, des praktischen Handelns und der Taten einer Person, die zur Überwindung der Krise der Kultur beitragen kann. Das Ziel der integrativen Erziehung ist es, eine moralische, verantwortungsbewusste Person zu formen. Heute geht es um das Verständnis des Menschen für moralische Realitäten, für Gut und Böse, für seinen Platz im Leben, für seine Bestimmung, für seine Verantwortung für die Natur, für das Schicksal der Kultur, für die geliebten Menschen, also in erster Linie um humanitäre Aspekte.

Schlüsselwörter: Österreichisches Bildungswesen, Deutsch als Fremdsprache, Reformen und Innovationen, gemäßigtes Modell, Wissenschaft und Technologie, europäische Integration, berufsorientierte höhere Schule.

Österreich ist derzeit ein Land mit zahlreichen Bildungsprojekten: für Kinder nationaler Minderheiten, für Kinder mit Migrationshintergrund und für Kinder, die auf europäische Integrationsprozesse ausgerichtet sind. Eine Analyse der österreichischen Bildungserfahrung wird eine umfassendere Bewertung und die Ermittlung von Entwicklungsperspektiven ermöglichen, was die Relevanz des Themas dieser Studie ausmacht.

Ziel des Artikels ist es, die wichtigsten Etappen des Aufbaus und der Entwicklung des Hochschulwesens in der Republik Österreich zu analysieren, wobei der Schwerpunkt auf den jüngsten Entwicklungen und der Integration von Kindern mit Migrationshintergrund liegt.

Bei der Darstellung der Ergebnisse der Studie werden wir den Grundsatz der hohen Relevanz wählen und hauptsächlich die neuesten Informationen sachlicher Art verwenden. Ein Beispiel dafür ist der Stand der Vorbereitungen der österreichischen Schulen auf den plötzlichen Zustrom von Binnenvertriebenen aus der Ukraine. Aber wir sollten die Vergangenheit nicht vergessen, denn die neuesten Entdeckungen ermöglichen es uns, einige der "weißen Flecken" zu beseitigen, die im Bildungsbereich und in den Geschichtswissenschaften aus vergangenen Zeiten übrig geblieben sind.

Integration ist der einzige Prozess der Interaktion zwischen Elementen, bei dem die Systematik des Endergebnisses des Prozesses gewährleistet ist und gleichzeitig die individuellen Eigenschaften der Integrationselemente erhalten bleiben. Integration ist in erster Linie eine Organisation von Wissen, die darauf abzielt, ein Maximum an Informationen zu minimalen Kosten zu erhalten oder zu produzieren.

Besonders interessant ist für uns die Tatsache, dass Österreich im Bildungs- und Kulturbereich heute sehr gute Noten bekommt, nicht für einzelne Rekorde - solche Aufgaben stellt sich das Land nicht - sondern für die hohe Lebensqualität und Sicherheit, die Unabhängigkeit in der Innen- und Außenpolitik [1].

Bei der Planung und Umsetzung der Reformen orientierten sich die Österreicher an ihren eigenen Interessen und erst in zweiter Linie an den außereuropäischen Trends. Im Rahmen des Bologna-Prozesses hatten sie nicht die Absicht, sofort nur Bachelor-Master auszubilden und sonst niemanden. Die neuen Einrichtungen haben sich erst dann im gesamten System durchgesetzt, als der Bedarf dafür bestand und die ausgewählten Muster in der Praxis getestet wurden.

Das beste Beispiel dafür war die Einführung eines "professionellen" Hochschulsektors mit "B"-Diplomen als Ergänzung zum traditionellen akademischen Sektor mit "A"-Hochschuldiplomen. Nach dem Beitritt Österreichs zur Europäischen Union und dem Übergang von einer industriellen zu einer post-industriellen Wirtschaft wurde beschlossen, den Anteil der Erwerbsbevölkerung mit Hochschulabschluss zu erhöhen. Dies geschah jedoch nicht durch den Bau von Nebengebäuden an Universitäten, sondern durch die Schaffung eines Netzes von Fachhochschulen (Polytechnische Schulen). Zu dieser Zeit waren solche Einrichtungen in Deutschland sehr gut etabliert und wurden zu einem wichtigen Faktor für das Wirtschaftswachstum [3].

Nach einer Reihe von Versuchen wurde 1993 in Österreich das Bundesgesetz über Fachhochschul-Studiengänge verabschiedet. Sie erkennt

den öffentlichen Wert und die Bedeutung der zwei- bis vierjährigen Studiengänge dieser Einrichtungen an und unterstreicht ihre Gleichwertigkeit mit den üblichen Universitätsabschlüssen. Dieser Schritt ist nach Ansicht der Internationalen Organisation für Zusammenarbeit und Entwicklung (OECD) von strategischer Bedeutung, da der neue Hochschulsektor erhebliche soziale und finanzielle Vorteile mit sich bringt [19]. Während die durchschnittliche Studiendauer bis zum Master-Abschluss in Österreich 7,4 Jahre beträgt, erreichen die Studierenden einen höheren Berufsschulabschluss fast dreimal so schnell! Während die Gesamtkosten für ein klassisches Programm fast 90.000 Dollar betragen, sind sie für eine Berufsausbildung geringer. Deshalb ist die Ausweitung des Hochschulwesens durch die Schaffung von Diplom-Instituten des Typs B der vernünftigste Schritt beim Übergang von der standardisierten industriellen Produktion zum Zeitalter der Ultrahochtechnologie und anderer Technologien [2].

Historisch gesehen hat sich die Bildungspraxis in Österreich in drei Richtungen entwickelt: für Kinder nationaler Minderheiten, für den multikulturellen Dialog (vertiefter Fremdsprachenunterricht) und für Kinder von Zuwanderern.

Anhand der Komponenten der Integrationserziehung lassen sich die charakteristischen Merkmale einer solchen Erziehung erkennen:

- Internationalisierung von Lehrplänen; Harmonisierung von Lehrplänen;
- Einführung eines Systems zur Anerkennung von Lehrplänen und Abschlüssen;
- die wachsende Bedeutung von Fremdsprachenkenntnissen und dem Erlernen der deutschen Sprache, die Entwicklung von interkulturellen Kommunikationsfähigkeiten;
- Einbindung in wissenschaftliche und pädagogische Berufsnetze, Teilnahme an interkulturellen Programmen, Entwicklung von Fähigkeiten zur Anpassung an die kulturellen Besonderheiten des globalen akademischen Umfelds, was zur persönlichen Entwicklung beiträgt [4].

Die ForscherInnen identifizieren die Elemente der österreichischen Universitätskultur, die im Zusammenhang mit der Integration entwickelt werden müssen:

- Führungsrolle der Universität im kulturellen Umfeld der Region;
- internationale Aktivitäten;
- internationale Zusammenarbeit der Fakultäten, persönliche Kontakte;

- Schaffung der Voraussetzungen für die Lehrtätigkeit, Konsultationen im Ausland;
- Schaffung von Bedingungen für die Ausbildung, Praktika und Forschung von Studenten [18].

Die Einbindung der Universitäten in globale Prozesse trägt zur Erneuerung der wissenschaftlichen, pädagogischen, persönlichen und organisatorischen Kapazitäten der Hochschulen auf individueller, institutioneller und systemischer Ebene bei. Dies zeigt sich vor allem in den gemeinsamen wissenschaftlichen Arbeiten, die von internationalen Autorenteams veröffentlicht werden. Es liegt auf der Hand, dass die Integration der Bildung von wirtschaftlichen, politischen, kulturellen und bildungspolitischen Faktoren abhängt [5].

Was die wirtschaftlichen Faktoren betrifft, so wird die integrative Bildung in Übereinstimmung mit der Logik der Marktwirtschaft aufgebaut, die sich in der Kommerzialisierung des wissenschaftlichen und pädagogischen Bereichs niederschlägt. Es entstehen unternehmerische Universitäten, die eine Vielzahl von Bildungsdienstleistungen anbieten. Der zunehmende Wettbewerb in diesem Bereich hat dazu geführt, dass das Marketing und internationale Rankings von Hochschulen eine größere Rolle spielen. Die Entwicklung der Integration wird auch durch die Informations- und Kommunikationstechnologien beeinflusst, die von den Hochschuleinrichtungen zur Werbung für Bildungsdienstleistungen und für das transnationale Fernstudium eingesetzt werden [7].

Die Integrationserziehung am Beispiel der deutschen Sprache ermöglicht es uns, die positiven Aspekte dieser Integration hervorzuheben:

- Die Modernisierung der Lehrpläne, der Austausch von wissenschaftlichem und pädagogischem Personal trägt zur Modernisierung und Verbesserung der Qualität der Ausbildung bei, die in einem interkulturellen beruflichen Umfeld agieren kann, und ihr Eintritt in die Volkswirtschaften der Länder, was sich positiv auf deren Wachstum auswirkt;
- Verbesserung der Qualität der wissenschaftlichen Forschung; die Integration fördert die ständige Forschung, um die Wettbewerbsfähigkeit der Absolventen zu gewährleisten;
- Verbreitung der eigenen Werte und Schaffung eines positiven Images des Landes;
- die internationale Hochschulbildung ist eine bedeutende Gewinnquelle für die nationalen Volkswirtschaften;
- Förderung der kulturellen Expansion [6].

In der heutigen Welt hängt der Erfolg sowohl des Einzelnen als auch des Landes von dem Modell der Fremdsprachenausbildung ab. Ein wichtiger Faktor für einen effektiveren Unterrichtsprozess ist, dass die Lehrer dank der didaktisch-pädagogischen Methodik die geringe Motivation der Schüler für die deutsche Sprache und die damit verbundenen Ängste überwinden müssen. Am Beispiel der ukrainischen Kinder haben wir festgestellt, dass Kinder, die Deutsch mit russischen oder ukrainischen Muttersprachlern lernten, schneller grammatikalisch korrekte Strukturen in der Sprache lernten als Kinder, die ursprünglich mit Muttersprachlern Deutsch lernten. Dies ist darauf zurückzuführen, dass das Ukrainische und das Deutsche sehr ähnliche grammatikalische Strukturen haben. Und das Lernen nach den Programmen der Integrationslehrbücher, die die Ähnlichkeiten zwischen Ukrainisch und Deutsch nicht berücksichtigen, verzögert den Prozess. Diejenigen, die eine Verbindung zu ihrer Muttersprache sehen, beginnen schneller mit Gleichaltrigen zu kommunizieren und konzentrieren sich mehr auf die Erweiterung ihres Wortschatzes und weniger auf langwieriges Grammatikstudium. Ausgehend von dem Verständnis, dass die Sprache ein Teil von uns selbst ist, sind sich alle Forscher einig, dass der Spracherwerb (die Beherrschung) nur im Prozess des Kontakts erfolgen kann [20]. Das Konzept des kommunikativ-kulturellen Inhalts im Deutschunterricht lautet beispielsweise: "Der kommunikative Deutschunterricht impliziert nach wie vor ein ganzheitliches Lernen, bei dem die kognitiven Fähigkeiten der linken Gehirnhälfte ebenso gespeichert werden wie die figurativ-affektiven Fähigkeiten der rechten Gehirnhälfte aktiviert werden" [8].

Um das Interesse am Lernen zu wecken, werden innovative Technologien eingesetzt, die für eine bestimmte Art von Unterricht am besten geeignet sind, und eine Vielzahl von Arbeitsformen und -methoden. Es werden aktiv Paar- und Gruppenarbeitsformen eingesetzt, die die freie Kommunikation der Schüler in der deutschen Sprache fördern, die Kooperationsfähigkeit wird entwickelt, der Sinn für Geselligkeit wird gefördert, der Wunsch, Freunde nicht im Stich zu lassen und ein zuverlässiger Partner zu sein. In einem freundschaftlichen Wettbewerb versucht jeder Schüler, so gut wie möglich zu antworten. Durch individuelle Spielaufgaben entwickelt sich die Persönlichkeit der Schüler, sie können ihre Stärken und ihr Wissen erproben, was den ständigen Wunsch nach Selbstbehauptung im Team fördert [9].

Eine der Besonderheiten des Deutschunterrichts ist die frühzeitige Verwendung authentischer Materialien (authentische Texte werden von der ersten Unterrichtsstunde an gegeben, und es wird auf die gegenseitige Beeinflussung der drei nationalen Kulturen gesetzt). So basiert der Leseunterricht von Anfang an auf dem Ganzwortprinzip an authentischen Texten und hat einen hohen Stellenwert, weil Schüler, die die lateinische Schrift bereits beherrschen, die Regeln des Lesens eher beherrschen. Sie verfügen über die Techniken, um einen fremdsprachigen Text zu bearbeiten, wobei sie sich mehr auf sprachliche Vermutungen verlassen. Rasche Fortschritte beim Lesen tragen zur schnelleren Entwicklung der soziokulturellen Kompetenz bei [17].

Ein Beispiel, das in Österreich für das Erlernen der deutschen Sprache üblich ist, kann angeführt werden: Jeder Lernende erhält eine Karte mit zwei Spalten mit Wörtern. Wenn er/sie ein Wort aus der ersten Spalte hört, muss er/sie das Wort aus der zweiten Spalte laut vorlesen. Für jedes Thema wird ein Satz dieser Karten erstellt. Die Übung hilft, Vokabeln zu einem bestimmten Thema schnell zu wiederholen, entwickelt das phonemische Hören, die Hör- und Lesefähigkeit, erkennt ein Wort nach dem Gehör und liest das nächste Wort korrekt vor [10].

Um die Lesetechnik zu verbessern, empfehlen wir das Lesen mit Textverständnis (sight-reading). Diese Art des Lesens ist in allen Lebensbereichen am weitesten verbreitet und erfolgt anhand von authentischen Texten mit Informationen über das Alltagsleben, die Traditionen, die Kultur und die Geschichte des Landes, dessen Sprache gelernt wird. Es ist das Lesen über sich selbst, ohne die obligatorische anschließende Verwendung der erhaltenen Informationen anzugeben [16].

Die Besonderheiten dieser Art des Lesens sind:

- ein hohes Tempo beim Kennenlernen des gesamten Textes;
- Genauigkeit des Verständnisses des Hauptinhalts und der wichtigsten Einzelheiten.

Zu diesem Zweck reicht es aus, 75 % des Hauptinhalts des Textes zu verstehen, sofern die restlichen 25 % nicht die wichtigsten Punkte enthalten, die für das Verständnis des Inhalts des gesamten Textes wesentlich sind [12].

Darüber hinaus ist es ratsam, moderne Bildungstechnologien zu nutzen, da unter diesen Bedingungen der Anteil der reproduktiven Tätigkeit verringert wird. Zu diesen Technologien gehören problemorientiertes Lernen, kollaboratives Lernen, Lernen auf mehreren Ebenen, forschungsbasierte Lernmethoden, projektbasierte Lernmethoden, De-

battiertechnologie, Technologie für Geschäfts-, Rollenspiele und andere Arten von Spielen, kooperatives Lernen und Fernunterrichtstechnologie [11].

Die Einführung eines persönlichkeitsorientierten Ansatzes in den Lehr- und Lernprozess einer Fremdsprache wird dazu beitragen, das Interesse am Erlernen der deutschen Sprache zu steigern. Die wichtigsten Merkmale dieses Ansatzes im Prozess des Fremdsprachenlernens sind Effektivität, d.h. ein hohes Niveau der Aufgabenerfüllung und das Erreichen der von jedem Schüler gesetzten Ziele; hohe Motivation, die zu einem gesteigerten Interesse am Erlernen von Fremdsprachen beiträgt, Ergonomie, da das Lernen in einer Atmosphäre der Zusammenarbeit stattfindet, ein positives Willkommens-Mikroklima, keine Überlastung und Überanstrengung. Dies sind die pädagogischen Bedingungen, unter denen sich das persönliche Potenzial der Schüler entfaltet und ihre Fähigkeiten verbessert werden [13].

Es gibt also einige methodische Besonderheiten im Deutschunterricht. Das Hauptziel des Unterrichts sollte jedoch in jeder Phase die kommunikative Entwicklung der Schüler sein, die den Grundstein für eine weitere Verbesserung der eigenen Sprachkenntnisse legt.

Beim Unterrichten der deutschen Sprache liegt der Schwerpunkt auf kognitiven Aufgaben, der Erweiterung des soziokulturellen und sprachlichen Wissens, der Verbesserung der kommunikativen Kompetenz, der Entwicklung der Fähigkeit, Traditionen, Bräuche, Kultur und andere Lebensweisen der Sprecher der betreffenden Sprache zu verstehen und zu akzeptieren [14].

Die Besonderheiten des Deutschunterrichts sind durch die Berücksichtigung der Dreisprachigkeit bedingt. Interferenz und Transfer gehören zu den wichtigsten psycholinguistischen Aspekten der Beherrschung der zweiten Sprache in einer Fremdsprache. Beim Erlernen der deutschen Sprache sollte die Berücksichtigung der Rolle der Muttersprache einer der wichtigsten Faktoren bei der Festlegung der grundlegenden theoretischen und methodischen Bestimmungen des Unterrichts sein [15].

Die Welt bewegt sich also rasch von der industriellen Produktion mit einer Massenbelegschaft, die auf einer 9- bis 12-jährigen Schulbildung basiert, hin zu einer "postindustriellen" Produktion, bei der die Vorbereitung auf den Arbeitsmarkt (die so genannte "Grundbildung") von 16 bis 22 Jahre. In den kommenden Jahren wird Österreich mit dem Aufkommen eines Ozeans von Robotern aller Art und dem massiven Ein-

satz von "künstlicher Intelligenz" den Weg Finnlands wiederholen. Es wäre keine schlechte Idee, sich den Österreichern anzuschließen und sogar bei europäischen Projekten gemeinsam zu handeln.

Literaturliste

1. Abrakova LV. Integrationstrends in der globalen Hochschulbildung: Dissertation Kandidat der Pädagogischen Wissenschaften: 13.00.01. 2003. 208 S.
2. Andronkina NM. New forms and types of lessons in teaching foreign language: Textbook. Gorno-Altai: Verlag der Staatlichen Universität Gorno-Altai; 2005. 208 S.
3. Baranova NV. Soziokulturelle Komponente in den Inhalten des Deutschunterrichts. In: Baranova N.V., Guseva S.B. Foreign Languages at School. 2001;4:42-45.
4. Belyankova NM. Integrierter Ansatz für den Unterricht von Schulkindern: Tutorial. M.: Prosveshcheniye; 2008. 440 S.
5. Bibik V. Integriertes Unterrichtssystem. M.: LAP Lambert Academic Publishing; 2012. 100 S.
6. Brazhnik EL. Formation and Development of Integration Processes in Modern European Education: Dissertation... Doktor der Pädagogischen Wissenschaften: 13.00.01. Sankt Petersburg; 2002. 354 S.
7. Karimova LA. Inhalt und Technologien des Fremdsprachenunterrichts unter den Bedingungen der Modernisierung der höheren Fachschulen: am Beispiel der nicht-linguistischen Universitäten der Länder des Bologna-Prozesses: Dissertation.... Cand. ped. sciences: 13.00.01. Kasan; 2009. 230 S.
8. Kreneva I. Integrierter Unterricht der deutschen Sprache in der Grundschule // I. Kreneva. M.: LAP Lambert Academic Publishing; 2012. 152 S.
9. Krestinsky IS. Herausbildung eines integrativen Ansatzes für den Fremdsprachenunterricht in der westeuropäischen Pädagogik der zweiten Hälfte des zwanzigsten Jahrhunderts: Dissertation.... Cand. ped. sciences. Twer: Staatliche Universität Twer; 2007. 20 S.
10. Krivolapova EV. Integrierter Unterricht als eine Form des Nicht-Standard-Unterrichts. Kasan: Buch, 2015. Bd. II: Innovative pädagogische Technologien. S. 113-115.
11. Luk'yanenko SI. Das Studium der Grammatik zur Entwicklung der Sprechfertigkeit (am Material der deutschen Sprache). In: Probleme der Lehrmethodik der Fremdsprachen in Schule und Universität. Rostow am Don: RPI; 1977. S. 90-101.
12. Mullagolova E. Key aspects of teaching foreign language at the present stage. Innovative pedagogical technologies: collection of materials of the II International. scientific. conf. Kazan: Book; 2015. Vol. 2. S. 17-19.
13. Polunina LN. Teacher Training in European Countries: National Priorities and Integration in the Context of the Bologna Process: diss. Kand. ped. sciences: 13.00.01. Tula, 2006. 202 S.

14. Poskrebysheva GY. Kulturelle und sprachliche Entwicklung der Persönlichkeit im Bildungsumfeld eines humanitären Gymnasiums: zum Material des Studiums der Fremdsprache und Kultur: Dissertation.... Kandidat der Pädagogischen Wissenschaften: 13.00.01. Saransk, 2004. 179 S.
15. Titova SV. Informations- und Kommunikationstechnologien in der geisteswissenschaftlichen Ausbildung: Theorie und Praxis: Handbuch für Studierende und Postgraduierte der Sprachabteilungen von Universitäten und Hochschulen. Moskau: Ikar; 2014. 240 S.
16. Chicherina NN. Zur Frage des Unterrichts einer zweiten Fremdsprache in der Sekundarstufe Schule. Fremdsprachen in der Schule. 1999;3:5-9.
17. Shcherbina LD. Intensive Fremdsprachenausbildung an einer technischen Universität: Dissertation... Cand. ped. sciences: 13.00.08. Rostow am Don, 2007. 179 S.
18. Didaktisch-metodische Konzeption. Ein Leitfa en für ie Gestaltung un Durchführung von Tertiärsprachenunterricht am Beispiel Deutsch nach Englisch. Von G.Neuner und B.Hufeisen unter Mitarbeit von Ute Koithan, Nicole Marx, Anta Kursisa. München. 2001. 105 S.
19. König E. Kontrastive Analysen Deutsch-Englisch: Eine Übersicht. In: Helbig, G., u.a. (Hg.): Deutsch als Fremdsprache. Ein internationales Handbuch. Berlin u.a., de Gruyter. S. 324-330.
20. Neuner G, Hunfeld H. Methoden des fremdsprachlichen Deutschunterrichts. Eine Einführung. Fernstudienreihe 4. Langenscheidt, Berlin. 1993. 53 S.

CHAPTER 2

University and institutional scientific research: Psychology and Pedagogy of Education and Digital transformation



INFORMALITY OF DIGITAL APPROACHES AND TIME TURBULENCE AS A SOCIAL DYSSYNCHRONY

*Elena Merzon, Irene Sibgatullina-Denis,
Svetlana Fedorova and Lane Teriaeva-Maerz*

Abstract. The authors of the article propose a discussion around the topic of avoidable and irremediable defects in the digital breakthrough for Higher Education in the period of pandemic and global economic turbulence. We pose the following questions: is it true that the better Higher Education Institutions prepare the staff for the analogue economy, there is less chance to build an education system for the digital economy? What could be a different models and requirements for ‘digital’ mentors’ competencies? And what can we say today about the synchronous-dyssynchronous education?

Keywords: dyssynchrony, turbulence, threats of time, digital education, crisis of academic mobility, digital mentors.

Recently, many universities around the world have reported dyssynchronous phenomena in education. When we talk about dyssynchrony, we always mean the phenomena of misalignment and unbalance. If this is “multiplied” by the situational economic and social picture of the 2020 pandemic, in which diseases and deaths, declining incomes of University employees, mass departure of foreign students from the territories of University countries, the loss of jobs of University administrators, and the crisis of academic mobility have acquired visible and tangible forms of real losses, then we can talk about the turbulence of today’s reality. A couple of years ago, managers of higher professional education discussed the trends of the technological revolution, which set additional difficulties in predicting the future of universities. Now the main question that many people ask themselves: “Is the digital breakthrough into the turbulence of time for stays for a long time or forever?”

There are many reasons for social dyssynchrony and economic turbulence. Factors of global and regional policies, a set of unsolved problems with national health systems, various types of prolonged economic and political sanctions irreconcilably move the world’s universities away from stability. Against this background, niches have emerged that interested economists and leading IT companies have declared as drivers of the world economy: artificial intelligence, smart cities, the Internet of things, and digital education. In fact, University employees have witnessed a global confrontation and a crisis of human capital. However,

dyssynchrony presupposes a “new vision” of familiar phenomena and sets new conditions for adaptation to external changes. The accelerated digitalisation of Higher Education, which can be called risky, due to its incredible speed and psychological unwillingness of subjects to use all its opportunities, has revealed both negative and positive aspects for the quality of University education [1]. We are talking, first of all, about the prospects of accumulated scientific capital in a large network University, where the ecosystem of engagement of people with existing new competencies for training personnel for the digital economy, which is limited by the existing framework and standards of the analog economy, is maximized.

It is equally important to understand that in the quality assurance system of Higher education, the issue of combining online learning as an educational format and information hygiene is important and timely. The almost instantaneous transition of the training format into digital has allowed many universities and its staff, following the thoughts of Rollo May, “to meet the alarm” [2], to detect the lack of digital mentors, both for students and for professors, to identify opportunities of various electronic platforms and personal competencies all University administrative staff. Following the words of another classic, Jaroslav Hašek in “Adventures of the good soldier Švejk”: “...it has never been so that nothing has happened” [3], we are talking about new mechanisms for “reloading” the tools of the quality of education in universities, without infringing on the old/former device, universal complexity and already implemented digital innovations. Following the situational impulses of “COVID-19 – time” in parallel analysis, it turned out to be a difficult way to adapt even the most efficient competencies of University employees to the inconsistent, unclear and dissynchronous picture of what is happening in the system of higher professional education during the pandemic, especially at its first stage.

Old / previous problems, without having time to find a solution, were transformed into “new equations” with a set of “unknown variables”. In this sense, we can talk about a new experience of the “strength” of the world’s University systems, academic mobility and quality assurance systems in international research, as well as the development of quality assurance strategies: to be ready for all kinds of threats, ideally, for any. Then the price of error increases almost in proportion to the threat, and to gain clarity and firmness of action, you need to accept and recognize the fear of the threat and optimize ways to overcome it. The digital break-

through was able to balance the threat and actions to optimize training for the digital economy. At least in the first round between “University players” and players of “digital” learning opportunities, those who were at the helm of digitalization implementation at least 5 years ago took the upper hand. But the rest had to fully “drink” new science and acquire new skills. There was no uncertainty at that moment, on the contrary, everything was very clear: if you don’t know how – learn, if you didn’t do it – do it, if you didn’t use it – use it. The digital mentoring vector abruptly changed the direction of the beam. The digital mentor in University system has now come to play a big role in creating interfaces that allow you to determine what is most effective for each learning student and for each teaching University Professor. Enriching learning content is also the responsibility of mentors, who are more flexible than anything or anyone, can regulate the vector of focus on the subject-new in digital learning: remote learning, quality control test programs, systems thinking, intellectual property, bioinformatics, introduction to blockchain, working with virtual reality technologies, neurotechnologies, computer psycholinguistics, graphic design, and so on [4].

A characteristic sign of the revealed inability of many universities to meet digital challenges is that the largest leaders of global transformations in the world, such as Google, Microsoft, Apple, as a rule, do not enter into a symbiosis with universities, solving the problems of reproduction of personnel within themselves, in fact, working as independent “funnel universities”, building their own process of personnel production for the digital economy. In fact, the digital breakthrough in the turbulence of the pandemic time revealed a tendency towards ‘Project’ universities that were able to set up a network of startups for digital education, a favorable environment for digital businesses, social initiatives and clubs, even in the most unfavorable conditions. In this case, scientific and technological Commerce can grow around and within universities. But if the University does not set the task of growing local and global businesses, and is positioned only as a cultural monopoly, then it can not avoid the dilemma between investing in passive assets of human capital and the risks of digital innovation.

Conclusion. The digital breakthrough in the conditions of economic turbulence stimulated the risks that universities inevitably “accepted”, although they had not yet transformed their ideologies and had not managed to overcome cognitive barriers. Network communication in the Internet will never replace live communication with a mentor, but it

will be able to “build” trajectories of uniting University teams for innovative scientific research, implementing technological projects and attracting digital mentors from all over the world [4]. Finding and working in such teams will definitely reduce the time needed to prepare digital projects, but there is a psychological risk of creating difficulties of trust and responsibility.

References

1. Merzon EE, Riabov OR. The ambiguity of digital education issues. *Psychology in Education*. 2019;1(1):39-43. DOI: <https://doi.org/10.33910/2686-9527-2019-1-1-39-43>
2. May R. *The meaning of anxiety*. New York: Ronald; 1950. 376 p.
3. Hašek J. *The Good Soldier Švejk*. Penguin Classics; 2005. 784 p.
4. Sibgatullina IF, Riabov OR. Flight of time into digital education. Project “Traditions and Innovations”: digital education, issue 1(4). Kazan: TR Institute for Education Development; 2019. 75 p.



INSTITUTIONAL STUDIES OF ASYNCHRONIES OF ACADEMIC MOBILITY AND THE CRISIS OF INTELLECTUAL INTEGRATION

Elena Merzon, Oskar Raif. Riabov, Irene Sibgatullina-Denis, Anna Samba

Abstract. The authors discuss the phenomenon of uneven, asynchronous academic migration and mobility that affects the intellectual landscape of countries, regions and continents. The article analyzes the pandemic COVID-19 crisis and how it affected the synchronicity of academic mobility processes and the implementation of research projects of the European system of international University cooperation. Identification is presented in the following terms: uneven phenomena, asynchronism, “order and chaos” of academic migration, “global circulation of minds”, distant digital mentoring, benchmarking the quality of Higher Education, migration management, turbulence of migration processes.

Keywords: academic migration, mobility of researchers, academic mobility crisis and pandemic, benchmarking, international strategies of research teams.

Migration processes are continuously monitored by world regions [3; 4]. The time of the COVID-19 pandemic was no exception. The events of the pandemic time have also affected many processes of the Higher Education world order and required a new look at the analysis of academic mobility processes. This was particularly true for intellectual integration projects, a very significant element of the system integration of education in all regions of the world. The pandemic time still bears an existential imprint [7], because, among other things, it concerns the foundations of existence and the psychological perspective of the life of academic workers. For many of them, not only social, but also internal psychological contradictions have increased, the usual order of life and academic mobility has got disturbed. The rapidly emerging COVID-19 pandemic became a trigger that, using collinear vectors [1], directed the situational anxiety of academic workers to questions about the future of academic migration and academic mobility in General, their own cognitive and emotional vulnerability in the context of social dissonance.

Have mobility programs in University consortia been put on “pause” for a long time or forever? What happened to those who found themselves in the “migration / immigration path” during the pandemic? And what is the intellectual “price” of all this for online University alliances in the face of already economic turbulence? How much did the threat of such a “pause” increase the uncertainty of the future quality of pro-

fessional training of scientific personnel in the world's universities, the future comparable results of research by joint scientific laboratories and international teams of scientists? However, the characterization of the essence of international migration as a social phenomenon still remains a perspective. However, if we consider academic migration in the period of the pandemic crisis as a social problem, we should assume its unpredictable asynchronous changes in the future. We are talking about changes that are now even difficult to predict. The only thing that can be stated is that the current status quo is specific.

A pandemic is a case where social institutions, mechanisms and governance systems of any state are tested, including in the field of migration. Counteracting the spread of COVID-19, most States have made changes in the regulation of migration, but these actions have affected the strengthening of controls at external and internal borders, restrictions on mobility within countries, facilitating the return of citizens to their countries, liberalizing immigration practices, extending and obtaining immigration documents, limiting quotas and transfers under the Dublin rules [2; 6]. Against the background of these problems, the COVID-19 pandemic also revealed many problematic areas of migration management "within the social and psychological picture" of academic mobility. For example, the complete absence of state programs to support academic workers from abroad, their eviction from their places of residence if the Professor did not rent housing independently, but lived on University campuses; ignoring or delaying requests for extension of documents for legal stay in the case of an objective lack of opportunities to return due to the disease COVID-19. During the period of self-isolation, many foreign academic workers faced neglect of their circumstances by the leaders of hosting Higher Education Institutions, since the main efforts of managers were directed at organizing remote digital training of students and supporting the level of professional training. In the ranking of rectors' attention, academic mobility programs came in last place, and this is at best, compared to the obvious ignoring of the problem at all.

Wang Haiyang, a researcher of academic migration processes from the northwestern pedagogical University of Lanzhou in China, suggests that these international processes are primarily the result of economic and social development, since they largely contribute to the development of the economy and the improvement of universities, or lead to intellectual losses and stagnation in the scientific and technical industry [11].

Let us note that international academic migration has a strong impact on the world economy, the world labor market, society and political institutions, stimulates the popularization of culture and cooperation between receiving and sending countries and their universities, and challenges globalization in the world educational environment [11]. The COVID-19 pandemic has severely restricted the movement of academic staff, reduced the opportunities for joint “live” scientific work in research and experimental laboratories and research and practical productions, student training programs, joint training projects in rare specialties (for example, such as the architect of unique buildings, educator of integrated multicultural preschool organizations, biotechnological therapist, genetic consultant, etc.), the implementation of planned grant “breakthrough” research, related to the development of new engineering equipment, special equipment, and technological modules).

In general, the status of academic mobility in the structure of long-term and short-term international migration remains quite high even during the pandemic. But it is becoming “transformed”. Chaotic trends become dependent not on the framework of educational policies of the world regions, but on regional trends of the pandemic. In the structure of the established order, there is an invasion of chaos and uncertainty.

Identifying the content of the concepts, we note that the group of the category of intellectual migrants always consists of highly qualified specialists quoted on the international labor market, and can both coincide and differ from the essence of the category of intellectuals – representatives of the group of academic mobility. That is, for example, if a University employee participates in the inter-University framework programs “Foreign Professor”, then they are included in the group of academic mobility categories within the framework of the consortium. However, if one of the universities of this Alliance offers a Professor employment and he agrees, then his move to another region can be called academic migration, especially if it is a question of leaving his country on a long-term contract for more than a year.

At the peak of the pandemic COVID-19 time, a group of German (Sigmund Freud PrivatUniversität, Berlin, Germany, Department of psychotherapy science) and Slovak (Comenius University in Bratislava, Faculty of Education) researchers together with colleagues from Russia (Kazan (Volga region) Federal University), on the platform of the Institute for

intellectual integrations in Vienna (Austria) [5; 8; 9] studied the state and dynamics of quantitative ratios of educational and scientific mobility in the short term events of the pandemic crisis. Data related to the “freezing” of projects and the “non-arrival” of scientists (Fig. 1 and Fig.2) and heads of education from the CIS territories to the region of the administrative district of Vienna of the Republic of Austria to the above-mentioned international Institute (Institute for intellectual integrations) for the implementation of postgraduate education modules for teachers of partner universities (sector 2), grant projects for research and joint publications (sector 1), planned internships in conjunction with territorial scholarship state funds (sector 3), professional practices for students in the format of benchmarking (sector 4). We analyzed only the programs planned for 2020, within the framework of agreements with the consortium, which could not be transformed into an online mode in the short term, because they are associated with practical communication on the transfer of scientific and educational technologies and modules of informal education in the field of international postgraduate programs in the areas of Economics and management of international education, inclusive education and rehabilitation, cognitive urbanism and architecture, world regional studies. We publish some local infographics without limiting the generality in the collection and storage of information, without threatening personal data.

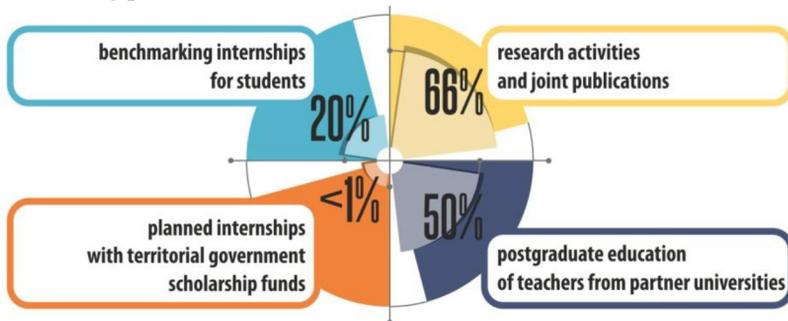


Fig. 1. Ratio of planned, “frozen” and implemented academic mobility programmes for 2020 (by sectors of mobility programmes of the International Platform of the Institute for Intellectual Integration in Vienna) in absolute values (benchmarking internships for students – 20 %, research activities and joint publications – 66 %, planned internships with territorial government scholarship funds – 1%, postgraduate education of teachers from partner universities – 50%).

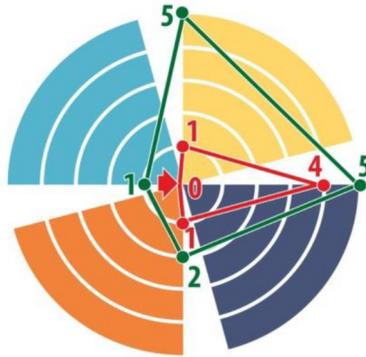


Fig. 2. Ratio of planned and actual participants in international intellectual integration programmes and projects in % (by sectors).

Analysis of graphs in Fig.1 and Fig. 2 shows a clear reduction, lack of implementation, and a downward trend in quantitative data for the intellectual integration and mobility sectors in the short term. The most vulnerable were the sector of planned internships together with territorial scholarship funds (sector 3) and the sector of professional practices for students in the format of benchmarking, that is, identification by students of the sending party of the best practices in the specialty being taught in the host country. The least vulnerable were sector 1 and 2 programs: research projects and postgraduate professional development by academic staff of the consortium, which could be partially or completely translated into an online format. This study is local in nature and does not pretend to generalize conclusions, but it clearly shows the real impact of the social consequences of the COVID-19 pandemic on the international cooperation of universities for the benefit of strengthening the intellectual landscape of their countries' economies.

Against the background of the abrupt suspension of academic mobility programs during the pandemic, universities quickly had to change the educational formats of professional training, including educational and professional practices. Distance learning became the norm even before the pandemic, but it was only during the pandemic that distance learning became the main real form of learning and dramatically changed the communication between professors and students. To varying degrees, the global COVID-19 pandemic has dramatically affected the quality of higher education, adult postgraduate training, and hu-

man resource development. The new format of educational design is already understood as quite necessary, but the issue of mobile academic exchange and targeted research and educational community of universities has not left the agenda.

The new sector of academic mobility (in double quotes) is the sector of online communications with the use of a managed electronic resource, international online seminars, plenary discussions and publication preparation. But such an understanding related to chosen academic work in a online learning environment still requires an understanding of aspects related to professional training in an e-learning environment in general. How does a “guest” remote “Professor” engage students in “their authentic charismatic” e-learning environment? How can educational or research modeling and digital mentoring be “reflected” in the learning environment to support the development of an educational and / or research community that includes the participation of “own” and foreign colleagues? How can explicit interactive actions be embedded in the digital remote learning environment and influence the digital economy in the future? These and other questions set new horizons for discussions in which answers are still being sought.

Conclusion. Against the backdrop of the economic crisis and turbulence associated with the COVID-19 pandemic, a decline in large-scale academic mobility is an inevitable trend. However, the number of academic migrants may increase due to the increasing difference in the responses of economies and management in higher professional education between developed and less developed countries, as well as the strengthening of General trends in economic integration. The psychological problem of scientific migration has become asynchronous, i.e. uneven, opportunities and adaptation to the new digital environment of University consortia and their implementation in practice.

References

1. Collinear vectors [Electronic resource]. Available from: <https://onlinem-school.com/math/library/vector/colinearity/>
2. Convention determining the state responsible for examining applications for asylum lodged in one of the Member States of the European Communities – Dublin Convention. Available from: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A41997A0819%2801%29>
3. Gerhards J, Hans S, Drewski D. Global inequality in the academic system: effects of national and university symbolic capital on international academic mobility. *High Education*. 2018;76,669-685. DOI: <https://doi-org.uaccess.ac.at/10.1007/s10734-018-0231-8>

4. Heike J. Transnational academic mobility and gender, *Globalisation, Societies and Education*. 2011;9(2):183-209. DOI: <https://doi.org/10.1080/14767724.2011.577199>
5. III Institut für intellektuelle Integration: website [Electronic resource]. Available from: <https://www.rbs-ife.at/>
6. *International Migration Journal*. Available from: <https://www.iom.int/international-migration-journal>
7. Kashevarova A. Existential storm: from emptiness to meaning. *The Russian* [Internet]. 2020 April 9 [cited 2020 Jul 15]; Psychological newspaper: [about 2 p.]. Available from: <https://psy.su/feed/8121/>
8. Riabov OR, Sibgatullina IF. Integration education of the Europe format, or what are intellectual integrations? In: *Europe in a new world reality: collective monograph*. Moscow, Russia: RU-SCIENCE; 2016, pp. 128-141. Available from: <https://elibrary.ru/item.asp?id=28092395>
9. Riabov-Raiff. O, Seybgll A, Sibgatullina IF, Teriaeva SA. Multi-vector European integration processes in education as a factor of innovative economy stability. In: Rodionova ME, editor. *Europe facing the challenges of the early 21st century: collective monograph*. Moscow: KNORUS; 2017, pp. 211-219. Available from: <https://www.elibrary.ru/item.asp?id=32623584>
10. Rostovskaya TK, Pismennaya EE, Skorobogatova VI. Academic mobility of Russian scientists: from “brain drain” to “brain circulation” model. *RUDN Journal of Economics*. 2018;26(4):706-717. DOI: <https://doi.org/10.22363/2313-2329-2018-26-4-706-717>
11. Wang H. International academic migration: history and trends. *Historical and Social-Educational Idea*. 2018;10(2-2):58-66. DOI: <https://doi.org/10.17748/2075-9908-2018-10-2/2-58-66>



FORMATION OF DIGITAL COMPETENCE IN STUDENTS OF PEDAGOGICAL INSTITUTIONS OF HIGHER EDUCATION IN UKRAINE IN THE POST-COVID SPACE

Kateryna Kruty, Iryna Desnova, Oksana Holiuk and Oleksandra Shykyrynska

Abstract. The article considers the digital competence of students and the impact of post-COVID on the process of its formation. The latest works of scientists on the proposed problem on the determining the digital competence of the future specialists in preschool and primary education have been analyzed. The concept of “digital competence” has been specified, its components specific to students of pedagogical institutions have been described. The state of formation of digital competence of the students of higher education institutions has been characterized. It is suggested that the students in the sphere of knowledge 01 – “Education/Pedagogy” should develop unique digital competencies that can qualitatively influence the planning and organization of the educational process with children of preschool and primary school age. In the course of the research the general and professional digital competencies of the future educators of preschool education institutions and primary school teachers have been determined. The article analyzes the results of self-testing of students majoring in 012 Preschool Education and 013 Primary Education. The results of the research provide a basis for a more in-depth study of the impact of post-COVID on the attitude of the students of the level of higher education “Bachelor” to information and communication technologies, what digital competencies they have and what digital security rules they use in the educational process. The results of the research can be used in the development of strategies for the formation of digital competence of students of other higher education institutions.

Keywords: post-COVID, digital competence, students of pedagogical specialties.

Topicality. The development of digital technologies has created conditions for unhindered and variable access to information. Data from global statistics for 2021 show that over the past ten years the quality of the Internet connection has improved significantly, the number of the Internet users has increased by 2.5 times, and there has been not only an increase but also a qualitative diversification of social media content, people aged 16 to 24 years are the most active users in the Internet space [1].

Digital competence is a basic component of the skill of the specialist of the XXI century. EU governments are increasingly paying attention

to the level of digital competence of citizens as an important factor in professional growth of the personality and a prerequisite for successful learning. European society's trends towards digitalization produce new priorities in the training of a specialist competitive in the labor market. The use of various digital learning tools is a new technological trend that affects all areas of human activity.

The scientific and educational society of the countries of the European Union is actively implementing the digital transformation in the sphere of education. Thus, European research centers and institutes have created the joint project Learning and Skills for the Digital Era, which provides for the definition of indicators of digital competence of modern person and the development of relevant recommendations [2]. EU countries have also developed a digital competence framework for citizens, pedagogues and educational organizations (DigComp) [3]. The DigComp framework is constantly being refined and improved and serves as a basis for the implementation of European strategic objectives.

The purpose of the article: to determine the state of formation of digital competence of the first-year students of pedagogical specialties in the conditions of COVID-19 pandemic.

The need for the formation of digital competence of students of pedagogical institutions of higher education is mentioned in many state regulations: the Law of Ukraine "On Higher Education" (2019); the Concept of Development of Digital Competencies in the Society of Ukraine (2020). An important component of modern digital change in Ukraine is the digitalization of the education system. In 2021, the Ministry of Digital Transformation of Ukraine described the framework of digital competence for the citizens of Ukraine, which was adapted by Ukrainian experts based on the results of research under the aegis of the dComFra project. The European conceptual and reference model of digital competencies for citizens DigComp 2.1 was taken as a basis. [4].

The concept of digital competence is actively discussed in studies of the Internet space (O. Boinytska A. Ferrari, J. Janssen, Y. Punie, E. Lopez-Meneses, J. Ramírez-Hurtado N. Selvin, F. Sirignano, S. Stoyanov, E. Vázquez-Cano et al.). The European Parliament defines digital competence as the confident, critical and responsible use of digital technologies for realization of educational, professional, training and other tasks [2]. In scientific sources, both national and foreign, the essence of the concept of digital competence is covered in various ways. Thus,

A. Sánchez-Caballé characterized this definition as the ability of the subject to use a variety of digital devices, consciously and critically evaluate information from digital and media content for further communication [5]. According to O. Ovcharuk, it is a set of practical skills of the subject that improve the process of information management, increase the effectiveness of cooperation for work, leisure, study, communication, etc. [6].

Digital competence provides the ability to protect personal data, the ability to analyze, isolate and effectively manage digital devices, rationally use, critically evaluate and independently create a variety of digital content. The space of digital technologies allows to solve many multifaceted problems [7]. Involving of students to work with various digital content while learning is becoming commonplace. Thus, the authors (M. Sharples, A. Adams, R. Ferguson, M. Gaved, P. McAndrew, B. Rienties, M. Weller, D. Whitelock et al.) suggest the use of gadgets and digital devices belonging to students in the educational process (BYOD approach). According to this approach, the teacher loses the function of the single source of knowledge, but the administrative and organizational functions come to the fore [8].

Under the conditions of accelerated development and improvement of digital environment, students of pedagogical institutions of higher education must have qualities that will allow them to effectively acquire professional knowledge and produce the necessary professional skills, namely: skills of work in global social networks and virtual groups, to analyze and process various data, to communicate with the use of digital content, to create safe conditions for the preservation and protection of their own digital data, to apply modern digital technologies to solve certain pedagogical problems [9]. Thus, in our opinion, digital competence is the ability of students of pedagogical specialties to effectively, in accordance with the stated purpose to use information and communication technologies in the educational process of the institution of higher education to solve pedagogical problems. It can improve navigation in fast information flows, provide modern data processing tools, optimize educational and future professional activities.

Many scholars substantiate the relationship between the formation of students' digital competence and the development of education in the digital environment, study the negative attitude of students to digital technologies, study the digital literacy skills they possess [10]. The following scientists N. Abramović, O. Boinytska, M. Gisbert-Cervera,

A. Sánchez-Caballé, N. Vukčević et al. paid attention to the study of various aspects of digital competence in student education. Researches and discussions on the need to form digital competence of students of higher education institutions (Y. Zhao, M. Sánchez Gómez, A. Pinto Llorente) have become relevant in scientific sources. Researchers emphasize the positive perception of digital innovations by students, which can qualitatively influence the development of education in the future under the influence of the digital environment [11].

The attention of scientists to the study of digital competence of students is due to a number of reasons. Thus, first of all, the rapid growth of opportunities provided by the Internet and the growth of its popularity among students characterize the Internet not only as a sphere of specific activities. The Internet for the modern student is the whole world, with a wealth of opportunities and activities that are not inferior to the world “offline” and mediate all spheres of life [12]. Secondly, the use of digital technologies in the educational process of higher education institution affects the content of teaching activities of both teachers and students, which in turn implies the need to study the outlined processes occurring in the educational circle. Thirdly, the transition to the concept of digital competence has a practical basis, as it is well aligned with current changes in the education system and opens the possibility for the application of the latest developments in the field of digital competence. The outlined reasons were the impetus for conducting own research on the formation of digital competence of students of pedagogical specialties [13].

The impact of the COVID-19 pandemic on the educational process in higher education institutions. It is clear that in the times of the active use of digital technologies, the educational process of higher education institution can not be left out. The years of the Covid-19 pandemic have made distance learning a leading means of obtaining higher education [14]. The use of information and communication technologies by teachers and students during distance learning has become the most relevant. The opportunity to acquire knowledge without leaving your own home creates comfortable and flexible conditions. However, not all students were ready for this form of education [15].

Not all higher education institutions were ready for such changes. Self-isolation became a significant factor that influenced the further process of organizing continuing education. Recently, a number of researches have emerged on the negative impact of the mentioned pan-

demic on the learning process of students (G. Bruno, L. Carpinelli, X. Wang, R. Zhang et al.). During online learning, students' problems such as lack of necessary psychological and organizational conditions for learning at home, inequality of technical conditions during learning (instability of online communication, insufficient power or lack of quality digital device (computer, laptop) etc. became apparent [16]. For many students, the lack of a computer during the COVID pandemic has been a significant barrier to learning and communicating with friends.

However, the COVID-19 pandemic also provoked positive changes in Ukraine's education system. The sudden transition to distance learning has led to increased motivation of both teachers and students to find interesting, non-standard digital tools that would diversify the educational process and make it more attractive [17]. Thus, during the COVID pandemic, the demand for the use of potential of digital technologies for active distance learning and the formation of students' digital skills has increased significantly.

Description of the research. The research aimed to determine the initial level of digital competence of the first-year students of the level of higher education "bachelor". The verification of the state of digital competence of students was done with the help of the Spanish test IKANOS [18]. The IKANOS self-diagnostic test determines the level of digital competence formation according to five general criteria, namely: information and ability to work with data; communication and cooperation; creation of digital content; security; problem solving. It allows to quickly and conveniently obtain data on the individual profile of digital competence. This test is based on the conceptual reference European model of digital competence DigComp 2.1.

The students of pedagogical higher education institutions in the sphere of knowledge 01 – "Education / Pedagogy" participated in the research. In the process of research activities, a multi-stage stratified sample was used: 369 students majoring in specialty 012 Preschool Education and 013 Primary Education aged 17-19, living in 23 cities of 5 regions of Ukraine. The testing was organized by the teachers of the Department of Preschool Education of Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University.

Students of the first year of study were asked to independently determine the profile of their own digital competence (self-testing method). Students' reports on the test were provided on request with observance of the rules of anonymity. The obtained data were grouped according

to the test indicators in the general table. The obtained data were processed, compared, analyzed and verified by ranking. The researchers are aware that due to the nature of the method used, the results obtained should be considered as a pilot study.

Research results. Therefore, we will analyze the test results according to each criterion. Thus, the criterion “Information and ability to work with data” allows to determine the need of respondents to use search engines to obtain information from the digital environment. This criterion is characterized by the following indicators: viewing, searching and filtering information and digital content; evaluation of information data and digital content; data, information and digital content management.

The first criterion determines how students create and update personal search strategies, how they access data, information, and content. The obtained diagnostic data on the indicator “*Viewing, searching and filtering information and digital content*” showed that the vast majority of students characterize their level of search and filtering information as “basic” - 42.86%. They successfully formulate information needs in more than one language and are able to find the necessary information on a particular website. 26.98% of respondents use the personal monitoring system when searching for the necessary information - the “average” level of the mentioned skills. Respondents of this group use combinations of various keywords in the search, use dots to find accurate results. Students with initial level of data search (14.29%) express a desire to constantly use the usual digital content, search for the necessary information mainly by keywords, synonymous and related terms. 15.87% of students said that they use technological and methodological digital innovations in the search and filtering of information, successfully synchronize their search tools with all their devices, prefer the advanced search system (advanced level).

The indicator “*Assessment of information and digital content*” identifies how the respondents analyze, compare and critically evaluate the reliability and trustworthiness of data sources, information and digital content. Analysis of test data shows that 28.57% of students have a “basic” level of information analysis, which is manifested in the desire to use reliable and verified sources on the advice of acquaintances and friends, can determine the purpose of online information sources. 25.41% of students try to use verified digital content, express a desire to critically check the reliability of information provided on the Internet, check the number, updates and quality of calls to websites (average level of eval-

uation of data from the digital environment). Among the respondents, 23.81% admit that they often use unreliable and insecure information from digital content (initial level). According to 22.21% of respondents, they successfully analyze, compare and critically evaluate the reliability of information from digital sources, apply criteria to assess the objectivity of content, authorship, timeliness and structure of information (advanced level of information evaluation).

The indicator "*Data, information and digital content management*" allows to determine how students organize, store and select data, information and content in digital environments. Analysis of the results of this indicator showed that 30.16% of the respondents manage data at the basic level. Students at this level said they know how to organize digital content with folders or tags. 28.56% of the respondents have an average level of data management, which is manifested in the ability to copy and move files between folders and devices or in the Internet cloud. 14.29% of students chose the initial level of data management, noting that they mainly use media such as internal or external disk, flash drive, memory card, etc. to store information. The lowest rate of data and digital content management was recorded at the advanced level - 26.99%, respectively. Such students know how to manage data and analyze it with the help of software, use clear rules for sorting and filtering files and folders. Thus, the results of the survey showed that the vast majority of students are aware of the possibilities of the Internet, they can easily find the necessary information, understand the interface settings of the new device or create their own news feed.

The criterion "*Communication and cooperation*" is characterized by the following indicators: interaction through digital technologies; information exchange using digital technologies; participation in public activities with the help of digital technologies; cooperation with the help of digital technologies; ethics of using digital technologies; digital identity management.

Statistics on the indicator "*Interaction through digital technologies*" show that 31.75% of students describe their result as corresponding to the level of "average". Students successfully use advanced video conferencing features (moderation, audio and video recording). 41.27% of the respondents are at the advanced level in interaction with other entities using digital devices. They by themselves determine the appropriateness of digital communications for specific content, know which communication tools and services are suitable for use in different circum-

stances. According to the results of the survey, 20.63% of students said that their level of interaction through digital technology corresponds to the level of “basic”. The respondents said that they know when to use synchronous and asynchronous communication, successfully manage spam. Only 6.35% chose the initial level of interaction with the help of digital technologies. This level is characterized by the ability to send, reply and forward emails.

Analysis of data on the indicator “*Information exchange using digital technologies*” allows us to conclude that 17.45% of students of pedagogical specialties use digital technologies to exchange information according to the levels of “initial” and “basic”. Students of the initial level share digital content that they think can be interesting and useful, exchange information with peers and teachers in a shared online space. Students with the basic level know how to use cloud services on the Internet (Google Disk, DropBox, OneDrive, etc.). According to 34.92% of the respondents, their level of use of digital technologies for information exchange corresponds to the level of “average”. They know how to modify and share content, manage content by filtering, selecting and editing information in order to obtain knowledge available online. It was also recorded that the answers of 30.18% of students correspond to the advanced level of communication using digital technologies. The students noted that they know how to mark the source of documents found on the Internet. It should be noted that the vast majority of students use their smartphones, mobile phones, computers and laptops. Mobile Internet is the most popular among students. Students use the Internet to find interesting information and search for information to study.

Analysis of the results on the indicator “*Participation in public activities with the help of digital technologies*” showed that 26.98% of students use digital services at the basic (actively use public services on the Internet) and average levels (know how to shop online, pay for the necessary goods and services). 25.40% have an initial level of use of public digital services – they have experience in conducting online surveys, post photos and resumes on the Internet. Only 20.64% have the advanced level of use of digital technologies in public activities. Students in this group seek to discuss various social issues on the Internet, using online forums and social networks.

The obtained diagnostic data on the indicator “*Cooperation with the help of digital technologies*” showed that the vast majority of students describe their level of cooperation as “average” [28, 57]. They have the nec-

essary multimedia skills to manage virtual meeting settings. 23.81% of the respondents believe that they have a “basic” level of cooperation with the help of digital devices. They use a variety of tools to collaborate online, know how to use social networks as channels to participate in virtual meetings. 22.22% of students of pedagogical specialties marked their level of cooperation with the help of digital technologies as “initial”. Students at this level are aware of the benefits of online collaboration, but rarely use it. 25.4% of students stated that they belong to the “advanced” level of establishing cooperation through digital devices. Students of the advanced level have the skills to create online documents, can invite and grant permissions for joint processing.

The indicator *“Ethics of using digital technologies”* helps to determine students’ knowledge of the rules of behaviors and know-how on the use of digital technologies and interaction in digital environments, as well as the extent to which the respondents are able to adapt communication strategies to specific audiences and take into account cultural diversity and generational contradictions in digital environments. Analysis of test data on the mentioned indicator shows that 52.39% of students know how to behave formally and informally on the Internet, try to communicate calmly and productively under any circumstances (advanced level); 28.57% of students believe that they follow ethical rules when using digital devices in accordance with the average level. Students in this group say they try to follow ethical rules, as well as they try to take action against people who behave unethically on the Internet. Unfortunately, 9.52% of respondents said that they have “initial” and “basic” levels of use of ethical norms in the digital environment. They state that they have knowledge of the ethics of publishing other people’s personal information and try to follow ethical rules when communicating online.

Creating of one or more digital identities and the ability to manage them allows anyone to improve their reputation. The extent to which students are able to work with data created with multiple digital tools, environments and services characterizes their ability to manage digital identity. Statistics on the indicator *“Digital identity management”* show that 36.51% of students describe their result as the one, corresponding to the level of “average”. Students of this group say they have multiple digital identities that they use depending on their purpose and content. 34.92% of the respondents believe that they personify their data at the advanced level. They are wary of the information they publish, know how to act, and who to turn to when digital identification issues arise.

20.63% of students have the skills to track their own Internet activity and describe their level of digital identity as basic. Unfortunately, 7.94% described their level of digital identity as corresponding to the initial. Students of this level are able to create their own profile on social networks and note that they would like to improve their own digital identity. Thus, both in learning activities on the Internet and in communication, students spend the same amount of time. They share data, information and digital content with others with the help of relevant digital technologies, can act as an intermediary, know practical methods of creating vocation and attribution.

Many students are focused on instant messaging, continuous news flow and participation in conversations in chat rooms, messengers and social networks. The focus of students on the instantaneous receipt of the necessary information creates the conditions for the use in the educational activities of communities and individual groups to share knowledge and experience in social networks.

The criterion "*Creation of digital content*" is characterized by the following indicators: creation and editing of digital content; integration and processing of digital content; compliance with copyright; programming. The obtained diagnostic data on the indicator "*Creation and editing of digital content*" showed that the vast majority of students create and edit digital content at the basic level - 36.51% (can create dynamic presentations and edit images). According to 25.40% of the respondents, they have "average" level of digital content editing, which is manifested in the skills of image editing using PhotoShop, Gimp, Coreldraw and others. 25.39% of students of pedagogical specialties showed such skills of creating digital content as video editing, audio editing and web page design (advanced level). 12.70% of students said that they belong to the "initial" level of digital content editing. The respondents with the initial level of editing mainly understand how to use text editors and creating presentations.

Determining the ability of students to change, refine, improve and integrate information and content into the existing body of knowledge to create new, original and relevant knowledge and content was determined using the indicator "*Integration and processing of digital content*". Obtained empirical data show that 31.75% of students have "basic" level of integration and processing of digital content. They know how to create digital content on the Internet (blog posts, videos on YouTube channels, etc.); 26.98% chose the "initial" level of integration and processing

of digital content. Students with initial level seek to create new digital content by combining and modifying information from the existing sources. The respondents noted their skills in creating and editing digital text files in various formats. 22.22% of the respondents say they have average level of integration and processing of digital content. Students with average level note the ability to create infographics, multimedia presentations with text, images, audio and video elements. 19.05% believe that they are at advanced level of integration and processing of digital content, respectively [19]. The students mentioned that they carefully select the type of digital media according to the goal and adapt it to the desired audience, try to structure and aesthetically design the created documents.

Analysis of the results on the indicator *“Compliance with copyright”* showed that 47.62% of students consider copyright at an advanced level. Students note that they respect the moral and economic rights of authors to their works. 26.98% of the respondents can determine when digital content becomes available illegally. They sometimes hold copyright (average level). The lowest rate of student compliance with copyright was recorded at the primary and basic levels - 12.7%, respectively. Students at both levels note that they constantly respect the copyright of digital content and are aware of its ethical and legal implications.

The ability of students to plan and develop sequences of clear instructions for the computer system to solve a specific problem or to implement a specific solution was determined using the indicator *“Programming”*. Analysis of the results according to the above criteria showed that 63.49% of students master programming at the elementary level. That is, the vast majority of skills that students have are technical in nature. 23.81% have a basic level of programming. Students often have some knowledge of programming tools. 6.35% chose the average and advanced levels of programming. Thus, it can be concluded that the indicator of *“programming”* is insufficiently formed in the respondents.

The criterion *“Security”* is characterized by the following indicators: security of use of digital devices; protection of personal data and confidentiality; health and well-being care; environmental protection.

Statistics on the indicator *“Security of use of digital devices”* show that 34.92% of students describe the level of security when using digital devices as corresponding to the level of *“basic”*. They are aware of the dangers of the Internet and understand the benefits of using special devices and systems. Some students know how computer viruses work and how

to protect their computers, but they do not always follow safety rules when using digital technology (28.57%). They believe that their level of security in the digital environment corresponds to the initial level. 23.81% of students said that they understand the importance of supporting the operating system, antivirus and other software to prevent security problems (average level), 12.7% are able to configure the settings of the firewall on various devices these respondents described their level of security as advanced.

Analysis of the indicator "*Protection of personal data and confidentiality*" allows us to conclude that the vast majority of students protect their personal data at the initial level - 31.75%. Students noted that they know how to restrict or deny access to their own geolocation, but can not always identify suspicious messages coming to the digital device. 28.57% of students of pedagogical specialties protect their own data and ensure the confidentiality of information about themselves in accordance with the level of "basic". This level is characterized by the ability of students to block messages dangerous to the digital device and determine the security of websites. 20.63% of respondents have an average level of protection of personal data. Students note that they are selective about providing information on social networks. 19.04% of the respondents indicated that their level of protection of personal information and privacy corresponds to the level of "advanced", they carefully check the privacy of digital services they use.

Analysis of the results on the indicator "*health and well-being care*" showed that 31.75% of students take care of their health while working on a computer at the level of "basic". Such students are attentive to ergonomic factors when using a digital device. Symptoms of technological dependence can be identified by 22.22% of the respondents. They believe that they take care of their health according to the average level. 33.33% of students have an advanced level of health care in the digital environment, which is determined by the ability to track the signs of cyberbullying and cyber intimidation. Unfortunately, 12.70% of the respondents have an initial level of health care when using digital applications. Students know that they need to control the time spent at the computer and take into account ergonomic factors, but do not always put their knowledge into practice.

These data coincide with the study of L. Carpinelli, G. Bruno and G. Savarese, which describes the attitude of Italian students to their own health during distance learning [15].

The obtained diagnostic data on the indicator "*Environmental protection*" showed that the vast majority of students carry out environmental protection in accordance with the level of "average" - 26.98%. Students try to reduce the power consumption of their devices. 19.04% of the respondents know how to dispose of digital devices and their components. They protect the environment according to the "basic" level. 14.3% of students of pedagogical specialties marked their level of care for the environment as "initial", looking for ways to use digital technologies more environmentally friendly. 39.68% of students said that they belong to the "advanced" level in environmental protection. They are guided by the rules of environmental behavior when buying and using digital devices.

The criterion "*Troubleshooting*" is characterized by the following indicators: solving technical problems when using digital devices; identification of needs and technological solutions; creative use of digital technologies; ways to improve digital competencies.

Analysis of test data on the indicator "*Solving technical problems when using digital devices*" shows that 28.57% of students have a "basic" level. They have knowledge of some of the causes of technical problems with digital devices, know where to look for the information on the Internet to solve technical problems and try to solve them through trial and error. These data correlate with the results of the study of digital competence of Montenegrin students [20]. 22.22% of students indicated that if they face a technical problem, they try to solve it on their own, are able to diagnose the operating system of the device and identify the problem (average level); 31.74% of the respondents said that they can independently edit operating system configurations on their own devices to solve technical problems (advanced level); 17.47% of the respondents believe that they are not able to cope with the basic technical problems of digital devices, but try to determine them step by step (initial level).

Statistics on the indicator "*Identification of needs and technological solutions*" show that 34.93% of students describe their result as corresponding to the level of "average". They know how to choose a device or service to solve the defined task, use the capabilities of their own computers. 34.92% of the respondents have knowledge of various technological solutions. Students say that they can translate different languages, enlarge or scale the text in different formats, have the ability to make technological decisions in accordance with the advanced level. 19.04% of students (basic level) have the functions of the most common digital devices. The initial level of search for technological solutions was

chosen by 11.11%. Students in this group do not have specific skills, but quickly adapt to new versions of programs.

The obtained diagnostic data on the indicator "*Creative use of digital technologies*" showed that the vast majority of students (34.92%) are aware of the possibilities of using digital technologies to solve various social and educational problems but use them elsewhere (initial level). 26.98% of the respondents believe that they have a "basic" level of creative use of digital content. 23.81% of students of pedagogical specialties noted their level of creative use of digital content as "average". The respondents noted that they can use a variety of data processing tools that systematize complex information. 14.29% of students stated that they belong to the "advanced" level, respectively. Students in this group have information about software learning algorithms.

Analysis of test data on the indicator "*Ways to improve digital competencies*" shows that 31.75% of students have "initial" and "basic" levels in the quest to improve knowledge of digital technologies. The respondents from both groups say they are interested in new digital devices and applications and want to improve them. 22.22% of students are characterized by the "average" level of improvement of knowledge of digital content. Students say they have online learning experience to improve their digital skills. 14.28% are following new trends in the digital world. Students marked their level of digital competence as "advanced". Therefore, in order to be active participants in modern digital trends, students need to constantly improve their digital competence. The future professional activity of students of pedagogical specialties also requires them to constantly search for, develop and use in the educational process with children of different ages a variety of digital applications. However, in our opinion, the digital competence of the future educators of preschool education institutions and primary school teachers should be determined not only by general but also by professional digital competencies.

Undoubtedly, the number of participants in the self-test is not fully representative. However, we believe that the pilot study allows us to outline the problems and identify students' requests to increase the level of digital competence as an important factor in the competitiveness of modern professionals. In the future, we plan, among other things, to expand the sample of respondents by increasing the total number of participants.

Conclusions. The results of the conducted research confirmed and supplemented the existing developments, as well as contributed to obtaining new data on the research problem. According to the results of the research, three groups of data were obtained: confirmed data (N. Drohovor et al.), experimental data of the research of checking the level of digital competence of students of pedagogical specialties; confirmed and supplemented data (N. Vukčević, N. Abramović, N. Perović, O. Ovcharuk et al.) on the data of the empirical study of digital competence of Montenegrin students, the use of digital learning tools by students; the experimental data (O. Buinytska et al.) were clarified and concretized; the results of our research supplemented the conclusions of scientists (L. Zdanevych, K. Kruty et al.) on the effectiveness of the formation of competencies during the training of students. The new results of the research include: the state of digital competence of students majoring in 012 Preschool Education and 013 Primary Education have been analyzed; the impact of the COVID-19 pandemic on the process of digital competence formation has been characterized.

Referencers

1. Hootsuite, We are social, Digital 2021: Global overview report. (We are social Publishing, 2021), <https://datareportal.com/reports/digital-2021-global-overview-report>. Accessed 12 April 2022
2. European Commission, Key Competences for Life Long Learning, COM (2018) 24 final. (European Union Publishing, 2018), https://ec.europa.eu/education/education-in-theeu/council-recommendation-on-key-competences-for-lifelong-learning_en. Accessed 10 April 2022
3. DigComp 2.1 The Digital Competence Framework for Citizens. EU Science Hub. The European Commission's science and knowledge service. 2017. [http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106281/web-digcomp2.1pdf_\(online\).pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106281/web-digcomp2.1pdf_(online).pdf)
4. Opys ramky tsyfrovoy kompetentnosti dlia hromadian Ukrainy / Ministerstvo tsyfrovoy transformatsii Ukrainy. 2021. 56 p. https://thedigital.gov.ua/storage/uploads/files/news_post/2021/3/mintsifra-oprilyudnyue-ramku-tsyfrovoy-kompetentnosti-dlya-gromadyan/%D0%9E%D0%A0%20%D0%A6%D0%9A.pdf
5. Sánchez-Caballé A, Gisbert-Cervera M, Esteve-Mon F. The digital competence of university students: a systematic literature review. *Aloma*. 2020;38(1):63-74. Available from: <https://pdfs.semanticscholar.org/4bd0/f12ab17157577a3657b17c364dea632083a9.pdf>
6. Ovcharuk O. Suchasni pidkhody do rozvytku tsyfrovoy kompetentnosti liudyny ta tsyfrovoho hromadianstva v Yevropeiskykh krainakh. *Informat*

- siini tekhnolohii i zasoby navchannia. 2020;76(2):1-13. DOI: 10.33407/itlt.v76i2.3526
7. Janssen J, Stoyanov S, Ferrari A, Punie Y, Pannekeet K, Sloep P. Experts' views on digital competence: Commonalities and differences. *Comput. Educat.* 2013;68:473-481. DOI: 10.1016/j.compedu.2013.06.008
 8. Sharples M, Adams A, Ferguson R, Gaved M, McAndrew P, Rienties B, Weller M, Whitelock D. *Innovating Pedagogy 2014: Open University Innovation Report 3*. Milton Keynes: The Open University; 2014. Available from: https://www.openuniversity.edu/sites/www.openuniversity.edu/files/The_Open_University_Innovating_Pedagogy_2014_0.pdf
 9. Drohovož N., Matiash V. Formuvannia tsyfrovyykh kompetentnosti u studentiv pedahohichnykh spetsialnosti. *Pedagogical Sciences*. 2019;177(1):151-156.
 10. Ukwoma S, Iwundu N, Iwundu I. Digital literacy skills possessed by students of UNN, implications for effective learning and performance: A study of the MTN Universities Connect Library / *New Library World*. 2016;117(11/12):702-720. DOI: <https://doi.org/10.1108/NLW-08-2016-0061>
 11. Zhao Y, Sánchez Gómez M, Pinto Llorente A, Zhao L. Digital Competence in Higher Education: Students' Perception and Personal Factors. *Sustainability*. 2021;13(21):121-134.
 12. Martzoukou K, Fulton C, Kostagiolas P, Lavrano, C. A study of higher education students' self-perceived digital competences for learning and everyday life online participation. *Journal of documentation* [online]. 202;76(6):1413-1458. Available from: <https://doi.org/10.1108/JD-03-2020-0041>
 13. Lopez-Meneses E, Sirignano F, Vázquez-Cano E, Ramírez-Hurtado J (). Digital competence of university students in three areas of the DigCom 2.1 model: a comparative study at three European universities. / *Australia. J. Educational. Technol.* 2020;36:69-88. DOI: 10.14742/ajet.5583
 14. Ali V. Online and Distance Learning in Higher Education Institutions: A Necessity in light of the COVID-19 pandemic. *Higher education*. 2020;10:16-25. DOI: 10.5539/hes.v10n3p16
 15. Carpinelli L, Bruno G, Savarese G. A Brief Research Report on the Perception and Satisfaction of Italian University Students With Disabilities and Specific Learning Disabilities at the Emergency Remote Teaching During the COVID-19 Lockdown. *Educational Psychology*, 2021. Available from: <https://www.frontiersin.org/articles/10.3389/educ.2021.680965/full>
 16. Wang X, Zhang R, Wang Z, Li T. How Does Digital Competence Preserve University Students' Psychological Well-Being During the Pandemic? An Investigation From Self-Determined Theory / *Educational Psychology*, 2021. Available from: <https://doi.org/10.3389/fpsyg.2021.652594>
 17. Selvin N. Digital Disadvantages: Examining the negative attitudes of university students toward digital technologies. *Teaching Higher education*. 2016;21:1006-1021. DOI: 10.1080/13562517.2016.1213229

18. Digital competences self-diagnosis test. ICANOS my digital competences. 2022. Available from: <https://test.ikanos.eus/index.php/1?newtest=Y&token=estuduniv&lang=en>
19. Boinytska O. Self-diagnostic test as one of the tools for determining the level of digital competence of masters. Open educational e-environment of modern university. 2018;5:29-40. DOI: 10.28925/2414-0325.2018.5.2940
20. Vukčević N, Abramović N, Perović N. Research of the level of digital competencies of students of the University “Adriatic” Bar. Proceeding of the Eastern European Conference of Management and Economics (EECME 2021) – Sustainable Development in Modern Knowledge Society. 2021;11. Art.No 01008. 11 p. Available from: <https://doi.org/10.1051/shsconf/202111101008>



PRIORITIES AND PROSPECTS FOR THE DEVELOPMENT OF KAZAKHSTANI RESEARCH UNIVERSITIES

Aiman Azmukhanova, Saniya Nurdavletova

Abstract. The purpose of this research is to analyze the state of the higher education sector, to summarize and study world experience in the process of transition of universities to a new type – an entrepreneurial university. Methodology of this research is conducted using methods such as abstract - logical and comparative analysis, the method of description and generalization. The sources of the study were theoretical and analytical articles, works of Kazakhstani and foreign authors, which deal with issues of higher education and the concept of TRIPLE HELIX. The authors present the main trends, priorities and prospects of the development of Kazakhstani research universities.

Keywords: Kazakhstan, research universities, science, education, business, government.

Introduction. The sphere of science is the most important part of the national heritage, a fundamental resource for the country's economic and social transformations. The scientific potential largely determines the place of the country in the world community, the prospects for competition in the foreign market, the possibilities for solving its internal problems.

An analysis of foreign experience shows that it is research universities that become the key source of ideas for the implementation of globally competitive innovations by the world's leading companies. Over the past two centuries, world-class research universities have emerged in Europe, the United States and a number of other countries, specializing in the production of new knowledge and the training of unique specialists in the context of breakthrough scientific and technological development. Stanford University (USA) is one of the most prestigious institutions of higher education in the world. Stanford conducts large-scale research covering almost all areas of science. A feature of world-class research universities is the presence of mutually beneficial and fruitful ties with industry. In particular, the relatively small in terms of student population, but the world-renowned Massachusetts Institute of Technology effectively cooperates with 700 leading US industrial corporations. This is important not only for the development of university science and higher education. The level of integration of education, science and production, high technologies have become decisive factors

in the development and growth of the competitiveness of the national economy.

Problem statement. In the context of the continuous modernization of national higher professional education, as well as the establishment of national research universities, national universities and research universities, the development strategy comes to the fore. Achieving the status of a research university is a lofty goal that requires a significant investment of time, effort, and finances [1].

At present, the measures taken by the Ministry of Education and Science of the Republic of Kazakhstan to transform the country's leading universities into research universities within the framework of the Bologna process in accordance with the experience and type of similar programs and institutions scientific and educational activities of foreign countries correspond to the content and spirit of national priorities.

Classical universities and institutes are considered a source of fundamental knowledge and skills. Today, in the period of integration of education, the experience of leading countries shows that the leading role in the innovative development of the country belongs to research universities. A research university is a scientific and educational complex with a developed innovative infrastructure, which carries out a full cycle of innovative activities that makes it possible to make a profit and is capable of training specialists with the skills of innovative entrepreneurship [2]. A research university can independently develop modular educational programs, create business structures with the participation of talented young scientists and students, launch design bureaus, and open an office for the commercialization of scientific developments.

It is known that at present, the research university, within the framework of the process of integrating education and science, acts "as a modern form of integrating education, science and innovative production, the characteristic features of which are the generation of knowledge and the conduct of a wide range of research; an effective system of training and retraining of personnel for high-tech sectors of the economy; a high degree of integration of science and education; – International recognition of scientific and educational activities; an effective system of commercialization of scientific results; presence of an innovative area; interdisciplinary teaching and research.

The main functions of a research university are the production, accumulation, storage, transfer and dissemination of knowledge. These functions were put in the basis of the first Kazakh universities. The

research university model is based on the interaction of three components: education, research and innovation. In the modern model of the university, a third function appears - the “flow” of information transfer to society or the “transfer of knowledge” [3].

The purpose of the activity of a research-type university as the main source of the most valuable raw material - intellect - is the effective functioning on the territory of a scientific and educational institution, as a national center of education, science and culture, where the training of highly qualified personnel is organically combined with modern scientific research and is carried out within the framework of a system-controlled set integrated educational and innovative complexes created on the basis of scientific and pedagogical schools.

The task of the research university is to organize interconnections and coexistence in a single physical space and interactive mode of the processes of education, scientific activity and commercialization of its results.

Discussion

Priorities and prospects for the development of Kazakhstani research universities

Currently, there are 120 universities in Kazakshatn, 44 of them are state, 15 are non-civil, and 61 are private. 14 universities are included in the authoritative international QS World University Rankings, and three universities are in the world university rankings. Compared to 2018, the number of students studying on grants has almost doubled (from 32 to 56 thousand).

As part of a large-scale process of transformation of the management of universities, 28 state higher educational institutions have passed into the status of a non-profit joint-stock company. Corporate governance has been introduced: a Board of Directors has been created in each university. The rector’s staff has been updated by more than 50%. Universities are given financial independence. The salaries of the teaching staff have been increased, the teaching load has been halved.

In 2021, funding for science has doubled. Scientists are provided with new opportunities for the implementation of scientific ideas. The material and technical renovation of research institutes continues. The national project “Technological breakthrough through digitalization, science and innovation” was developed and approved, as well as the Concept for the development of science for 2022-2026.

A number of innovations are planned in the higher education system: the creation of the first online universities, the opening of branches of leading foreign universities, an increase in the number of grants by 5,000, and a reorientation of the Bolashak program [4].

A review of the discourse of Kazakh scientists on the implementation of the credit system of education shows the ambiguity of its assessment. The positive side of the credit system is that it increased the amount of independent work of students, developing their thinking during the study, taking notes, abstracting multiple texts; increased the work of both teachers and students on the specification and operationalization of concepts during testing; increased transparency and objectivity of knowledge assessment, which, accordingly, reduced the possibility of corruption in the educational process. At the same time during the credit system implementation, there were some problems.

The credit system with its learning process leveled the former student group, which contributed to the upbringing of collectivism, and communicativeness. Further, students, making their schedule of study, can choose easy courses that are not relevant to their profession, or choose subjects based on the subjective preferences of teachers.

Solving these problems, in our opinion, requires a comprehensive approach: increasing the responsibility of the academic tutor of students-adviser; strengthening the educational work of the curators of student groups; working with teachers themselves to improve their knowledge and pedagogical ethics in their relations with students.

Many new training courses will need to be more practice-oriented. Internships in firms and stays abroad should provide students with the opportunity to learn new forms of work organization and the necessary abilities.

Finally, every Kazakhstani university should be linked to Western programs that encourage student mobility, as well as researcher mobility.

Internationalization of education and research is a necessary direction of development, which gives impetus to the substantive modernization of universities. The importance of international and global relations in the curricula of higher educational institutions is increasing in perspective. Internet, telecommunication, satellite television, and the development of electronic trade promote the creation of the international education market. This modification manifests itself primarily in the field of university education. The “virtual campus” is the actual

phenomenon in western universities. In Kazakhstan, it is also important to create a “virtual campus” in universities and the government should provide credits in this direction. It will promote the aspiration of high schools to be competitive at a world level. Teaching in universities involved in the program should be brought into line and didactic software should be produced. In the future, there may be a kind of “market” for universities and teachers. In universities, teachers actively present themselves in the market, intensively communicate, and attract more students, including foreign students. That is, one aspect of the internationalization of the education market is cooperation with foreign universities.

The latest trend in developed countries is the increasing role of universities in the generation of scientific and technical knowledge. There is a big difference between traditional research laboratories near universities and university laboratories. The basis of the model of the university laboratory is a mechanism guaranteeing the crossing of ideas coming from universities and industrial researchers, easy training of staff, and transfer of experience between universities and in-house research projects. This model increases access to university research.

At the modern stage of the formation of research Universities, simultaneous processes of differentiation of the Kazakhstan higher educational institutions proceed. 9 national universities have been allocated; in 2010, 10 innovation-oriented universities were identified through a competition, based on which their transformation into world-class research universities is planned; Nazarbayev University has been created and the first graduates of specialists have graduated; KazNITU named after K.I. Satpayev has been formed. Nazarbayev University is an institution of higher education at the international level, created on the initiative of the First President of Kazakhstan to integrate education, science, and production, create an effective academic environment and conditions for the entry of domestic scientific structures into the world scientific space. In 2015, Nazarbayev University was given the status of a research university and its development program for 2016-2020 was approved [5]. The integrated scientific system of Nazarbayev University includes the National Laboratory Astana and Nazarbayev University Research and Innovation System (NURIS), which generally provide the link between the academic process, research activities, and the development of proposals and recommendations for the implementation of research developments in production. One of the priority tasks of NURIS is to

create an intellectual and innovative cluster of Nazarbayev University as part of the development of a belt of knowledge-intensive and high-tech companies. The key elements of the cluster are schools and research centers, commercialization office, business incubator, technopark, and science park Astana Business Campus. In addition to research and educational activities, engineering, pilot, and investment activities will be carried out in the science park. In the field of scientific activity, the development of Nazarbayev University is carried out in two main directions. Firstly, it is the development of science in the traditional sense, when scientific activity is formed mainly by the teaching staff and researchers. Participation of undergraduate, graduate, and doctoral students in research projects is a prerequisite. Secondly, scientific activity covers not only the interests of research staff and faculty but also takes into account the national scientific priorities of the republic. Following the personnel policy, Nazarbayev University purposefully supports employees aiming to continue their studies in Master's and Ph.D. programs as well as a postdoctoral research and scientific internships. Based on Nazarbayev University schools by international standards, more than 60 modern laboratories have been established. The strategic development of Nazarbayev University is based on international cooperation and partnership with the world-class educational institutions of the United States and the United Kingdom (Cambridge University, Duke University, University College London, University of Pennsylvania, and others). The University uses the experience of its partners in developing undergraduate, graduate, and doctoral programs, managing scientific and educational processes and developing scientific research. Today Nazarbayev University is a national brand of education, the first higher education institution in Kazakhstan that works according to international academic standards and is guided by the principles of academic freedom and autonomy. Its experience is gradually transferred to all universities in the country.

The following characteristics of the formation of the Kazakhstani model of research university can be highlighted:

- the high potential of faculty and teaching staff;
- unique cluster structure that allows combining education with research;
- a significant degree of integration with industry and academic research institutions;
- well-developed master and doctoral programs;

- developed scientific and educational infrastructure;
- the significant volume of budgetary and contractual financing of scientific and applied research;
- mutually beneficial ties and productive contacts with business in training specialists, conducting and implementing R&D;
- extensive scientific and educational international relations.

Analysis of the problems of the formation of world-class research universities in our country shows the need for new relations between science and education, on the one hand, and the state, university, and business, on the other hand.

Conclusion. Kazakhstan has to form new mechanisms of a partnership between the state, society, education, industry, and business, to create world-class research universities and to preserve the research university as the main source of new knowledge. In the future, the strategic goal of research universities should be to create and strengthen mutually beneficial relationships between business and the university, with a focus on the development of technology transfer, additional education, and provision of in-demand graduates. Research universities should take responsibility for the preservation and development of the human resource potential of Kazakhstani science, high technology, and vocational education. They must acquire uniqueness and regional identity, becoming effective centers of science, education, and culture.

Factors contributing to the success of Kazakhstan's world-class universities will be the training of their own talents, who will actively transfer knowledge and technology to production, and expand infrastructure at their own expense. The development of effective management will be aimed at encouraging leadership qualities, strategic visions and innovations.

References

1. Abdyrov AM, Sarbassova KA, Tashkenbayeva ZhM. Formirovaniye issledovatel'skikh universitetov i ikh rol' v innovatsionnom razvitiy Respubliki Kazakhstan. Mezhdunarodnyi zhurnal prikladnykh i fundamental'nykh issledovaniy. 2015;6-3:496-500. Available from: <https://applied-research.ru/ru/article/view?id=6934>
2. Mukasheva Zh. Usileniye sotrudnichestva mezhdou universitetami i industriei v Kazakhstane dlya razvitiya innovatsiy: rol gosudarstva. Available from: <https://www.soros.kz/wp-content/uploads/2021/03>
3. Smorodinskaya N. Triple Helix as a New Matrix of Economic Systems. Innovatsii. 2011;4(150):66-78.

4. Interview with R. Almazov. Research University – global trend of the development of science and education [Internet]. Kazpravda, 2021 [cited 2021 Jun 14]. Available from: <https://kazpravda.kz/n/issledovatelskiy-universitet-mirovoy-trend-razvitiya-obrazovaniya-i-nauki/>
5. Baizakkhova G. Issledovatel'skie universitety kak uslovie innovatsionnogo razvitiya [Internet]. Inform.kz, 2016 [cited 2016 Nov 1] https://www.inform.kz/ru/issledovatel-skie-universitety-kak-uslovie-innovatsionnogo-razvitiya_a2964943



THE IMAGE OF SCIENCE AND THE CHOICE OF SCIENTIFIC CAREERS IN THE CONTEMPORARY CULTURE

Natalya Martishina, Elena Taskaeva

Abstract. The image of science existing in the Russian public mind has been developing under the influence of a number of factors, the current state of science proper being just one of them. The authors point out that public beliefs about science can affect both the managerial decisions related to the functioning of science and the public willingness to perceive results of scientific research, thus having an impact on the opportunities for the development of science that are formed in the community. The ambivalence of the image of science in the public mind of the contemporary Russian society that can be regarded as a mixture of scientism and anti-science attitudes is described. Various factors influencing the public image of science are considered. The analysis includes results of local research conducted by the authors. A focus is made on the influence of public beliefs and ideas about science on the choice of scientific careers by young people; the internal contradictions of such a choice in the contemporary Russian culture are identified.

Keywords: science, image of science, public mind, scientism, anti-science, scientific occupation.

Introduction

Science is one of the cornerstones of the modern civilization. One cannot imagine modern production processes, everyday lives, leisure time, cultural events and many other forms of social activities without results of scientific research being implemented, as the modern civilization obviously has been formed due to the development of science. It should be recognized that the contemporary science reaches out of the limits of one particular social institution and begins to program and design the whole environment of the contemporary society [1, 3]. Although the idea of complete integration of science into different areas of social life has been accepted by the public, the current variety of forms of such integration deserves further research. Particularly, in the field of social philosophy and the philosophy of science, a comprehensive reflection is required for the fact that in order to understand the capabilities and further prospects of the development of science, to find the best possible organization of scientific research processes, to assess the scientific research results the community relies not only on the objective general characteristics of science proper, but also on some specific attitudes to science that have developed in a certain cultural context.

One of the fundamental characteristics of the functioning of public mind is the ambiguity of the link between the concepts existing in the public mind and the real objects presented by those concepts. This is true not only in connection with images of local objects or concepts generated by certain social groups; on the contrary, this pattern can be identified in the functioning within the public mind of the most general notions that represent the most important cultural phenomena. The cognitive images (collective interpretations) of the most important phenomena within a culture or a society are only to a certain extent equivalent to their actual and changeable existence, while the formation of such collective interpretations is affected by a number of social and cultural factors, including the cultural tradition, a government set of policies, the mass-media impact, the influence of a current situation, etc.

Therefore, the image of science is an aggregate of ideas and beliefs related to the essence, specificity, capabilities and social functions of science that exist in the public mind of a certain community at a particular stage of its development. These beliefs do not necessarily reflect the actual status of science in this community. It is possible to speak of an aggregate of ideas developing in accordance to its own internal logic and determined by a range of circumstances of which the actual situation is just one among others. The image of science in the public mind depends on the functioning of an educational system, on common standards of portraying scientists in fiction literature, and on the flows of messages related to results of scientific research or interpretations of scientific ideas that circulate in the community. This complex of ideas reflects the public expectations and fears as well as various stereotypes related to science and scientists.

One of the first concepts defining the image of science as a self-sufficient phenomenon was suggested by Y. Elkana in his "Anthropology of Knowledge". The thinker regarded the image of science as the views of both the scientific community and the general public on the essence and purposes of science, on its social role and its place among the other forms of culture [2]. In Russian philosophic works, the image of science as an object of research was initially identified by A.P. Ogurcov who described this image as the specific perception of its structure and interrelation of its components, a certain interpretation of functions, goals and the sense of science, of the results of scientific progress [3]. He pointed out that such integrative understanding of science exists in the

public mind both in reflective and pre-reflective forms. The reflective form develops in the philosophic and scientific, i.e., professional discourse, while the pre-reflective form is essentially the combination of stereotypes that exist in the public mind. The second form of the images of science corresponds to the object of our research.

A number of studies carried out in the following years were focused mainly on the philosophic and scientific images of science; the review and possible classification of articles can be found in [4]. In many cases the reflective and socio-cultural images of science were not strictly distinguished, because many authors believed that any image of science should always comprise social and cultural aspects [5]. In general, the theorizing on the images of science in the public mind was quite occasional. At the same time, surveys on the perception of and the attitudes to science and scientists in the public mind, on the status of science in the local community were conducted in Russia on a regular basis. The initial point of such research is thought to be a profound paper by S.A. Kugel and I.A. Maisel [6], which set a task of studying a wide spectrum of scientism and anti-science attitudes that existed in the post-Soviet Russia, as well as the factors that caused the formation of such attitudes. Institute of Sociology of the Russian Academy of Sciences in 1992 and the Russian Public Opinion Research Center in 1995 conducted surveys on the attitude toward contemporary science among the citizens and residents of Russia (the results can be found in [7]). Since 1995, Scientific Research and Statistics Center under the guidance of L.M. Gokhberg carried out research that comprised the following aspects: 1) the public attitude to the results of scientific research (including both general cognitive and applied aspects); 2) the attitude to scientific work and scientists (the image of science and the prestige of scientific occupation); 3) the attitude to social roles of science (e.g., innovative and educational ones) [8]. The complex analysis of those findings was published in [9].

In Russian social philosophy a number of attempts were made to systematize empiric evidence and to identify trends in the transformation of the concept of science in the public mind [10; 11]. The researchers emphasized the inconsistency of the image of science in the public mind, as well as its instability and the need for special measures aimed at the correction of negative trends, e.g., the purposeful development of the image of science [10].

Theoretical framework

The methodological basis for our research is epistemic constructivism; the explanation of its relation to social constructivism can be seen in [12]. In the contemporary epistemology, within the framework of constructivist approach, cognition is understood as constructing gnoseological images as opposed to the traditional concept of an image thought to be a reflection of a natural object [13]. Therefore, a gnoseological image of any object is considered to be formed through cognitive activities, thus becoming a construct that depends both on the object proper and the characteristic features of cognitive activities. From the constructivist point of view, the incomplete correlation between the object and the image, the relative independence of both the image and the procedures of its development cannot be regarded as the insufficiency of knowledge or a source of mistakes, but should be seen as the basic feature of cognition. Thus, epistemological research is focused on the analysis of factors that influence the process of reflection, on identifying the link between the social and cultural conditions for cognition and the characteristic features of a certain gnoseological image, both of its form and content.

The epistemic constructivism supports applied empirical research and is based on its findings, as the dynamics of any existing gnoseological image as well as the volatility of ideas in the public mind are clearly identifiable. According to I.T. Kasavin, a social epistemologist must carry out research in the case study style in order to construct those facts that are required [14, 540]. While agreeing with this methodological postulate, we believe that a regular review of the current situation is necessary because the image of science, as well as public attitudes to other social phenomena, change constantly.

It is possible to identify two patterns of conducting the applied research of the place of science in Russia over the period in question. On the one hand, the actual awareness of the Russian public related to scientific ideas, forms and methods of scientific work, the structure of scientific knowledge, the real achievements of Russian and foreign science were evaluated. In 2008 and 2013, the Russian Public Opinion Research Center conducted nation-wide surveys using J. Durant and J. Miller's questionnaire that was previously applied in a number of countries. The questionnaire was designed in order to evaluate the level of scientific awareness of the public, it included a number of simple questions on the basic facts in different fields of scientific knowledge (e.g., the first question was "Does the Earth go around the Sun or Does the Sun go around

the Earth?”). The relevance of the idea of science in the public mind was also evaluated in accordance with international research methods, e.g., a question was asked if astrology was a science [8]. In 2013, according to the number of correct answers to the questions about the basic scientific facts, Russia ranked at the 28th place among 38 countries where similar research was conducted, e.g., nearly a half of the respondents considered astrology to be a science. We believe that the revealed insufficient level of scientific knowledge demonstrated by the public is one of the key factors that influence the development of the image of science in the public mind.

On the other hand, the applied research was aimed at evaluating the status of science and scientists in the community either through direct questions, e.g., “How high is the prestige of scientific work?”, or indirectly, asking about the necessity and sufficiency of the scientific research financing, or about the attitude to brain drain that was happening over the post-Soviet period, etc. The survey findings demonstrated not only the ambivalence of the image of science in the public mind, but also a number of gaps, e.g., between the declared general positive evaluation of science and the actual considerable distancing from science shown by the public, which was reflected in a low interest to scientific issues and even a lower level of awareness of the contemporary scientific research, as well as in the common belief that science would not bring the return on investment [8]. Our own research [15] supports the conclusion about controversial perception of science in the contemporary Russian culture that is a mix of scientism and anti-science attitudes existing currently in the Russian public mind.

The issue of the choice of a scientific career was regarded by the researchers as an indicator of the actual public attitude to science. A question was asked in the survey: “Would you like your son/daughter to become a scientist?”. In 1995 the number of parents who supported such a choice outweighed the number of opponents (41 % vs. 31 %, the other respondents could not make up their mind). However, surveys conducted from 2005 to 2011 steadily revealed larger shares of opponents of scientific careers for their children. Compared to that, in the USA the percentage of those who supported the choice of science as a professional field over a comparable period (2001-2012) was 80 % or over, while the share of opponents did not exceed 1 % [8]. A.V. Yurevich considers the result to be the most useful indicator for assessing the actual status of science in Russia in the 2000s [16].

Statement of the problem

The image of science in the public mind is not just a specific and peculiar set of beliefs that attracts researchers' interest. The image of science in a particular society can influence such processes as the perception of scientific facts by the public, the willingness to accept the scientific point of view and to rely on scientific research results as an authoritative source of knowledge, as well as the ability of the public to distinguish between the scientific concepts and those just pretending to be scientific. The dominant image of science in a community indirectly (and sometimes directly, as the government authorities also represent a part of the public mind) influences key managerial decisions taken in the field of economic and social policies regarding science, as well as the call for scientific expertise on important issues and the level of trust in its findings. This image also affects the arrangement of the educational system and the contents of educational courses, the level of financial support for scientific research by the government and non-governmental organizations. The described types of influence tend to create the environment in which science continues to develop. This is the reason why the image of science existing in the public mind along with the factors that influence the formation of this image, as well as its impact on various cultural and social processes, deserve further consideration and reflection. The object of our research are the factors that influence the development of the image of science in the contemporary Russian culture along with the key features of such an image. We suppose that, on the one hand, the image of science within a culture is quite persistent as it is determined by a historical tradition; on the other hand, it follows the changes in the nature of a number of determining factors. In the contemporary Russian culture, the image of science is undergoing transformation along with the public attitudes to many other aspects of social reality. Our research looks into the current state of affairs.

The willingness of younger generations to choose science as the field of professional careers and the readiness of the community to support such a choice can highlight the actual attitude to science in a particular culture. The explicit respect for scientific work, the understanding of its value for the whole community, the recognition of its prospects can result in practical measures, which in turn allows to capture the dominant image of science in the public mind of a certain community. The choice of a scientific career and the motivation for it can be regarded as an index that allows to monitor the dynamics of public attitudes to sci-

ence. Therefore, the issue of motivation and decision-making of young people who begin to work in the field of science became the focus of our research. We regard this issue both as a particular aspect of the research and as a problem having its own value.

Methods

Both the factors forming the attitude of general Russian public to science and the effect of such attitude on the possible choice of science as a field of professional career made by university graduates and post-graduates have been considered by the authors based on analytical review of relevant literature. In addition, we have conducted a series of our own empirical research. The research results will be presented below.

One of our studies was initiated on the spot. In February 2021, an extensive discussion took place on the Novosibirsk city local news site www.ngs.ru, which was triggered by a public speech of a scientist who worked in a local research institution. The speaker criticized the underpayment of scientific work that is typical of many institutions of the Academy of Sciences. Altogether, 6 articles dealing with the matter were consequently published on the city news site; each article received a large number of comments. We conducted content analysis of the comments related to the three most popular articles (355, 652 and 957 comments respectively), while calculating the number of definitely positive, neutral (or offering options) and definitely negative assessments of the value of science and its status in the contemporary Russia. As a result, we obtained a “snap-shot” of the public opinion on the issue, which is quite indicative.

Another kind of research was carried out over a period of time. A survey was conducted among post-graduate students at Siberian Transport University with the purpose of identifying personal motives for the choice of post-graduate studies, thus, focusing on the choice of science as the field of possible professional career. The questionnaire included questions about factors that influenced a student’s choice. The respondents were asked to arrange in the hierarchical order such factors as their family traditions, friends or acquaintances’ advice, lecturers and teachers’ recommendations, personal interest in a particular field of research, a wish to obtain new knowledge, financial reasons, career growth prospects, or even a need to solve a particular problem (e.g., a chance to postpone the obligatory military service for male graduates). Students could indicate that some factors did not affect their decision. A number of questions were about one’s personal attitude to studies at

the under-graduate stage, participation in student research work, communication with scientific supervisors. Later, the correlation of answers with the main subject of the survey was found. The surveys were conducted in 2014 and 2020; the participants were students entering their post-graduate course: 36 students in 2014 and 21 students in 2020.

Discussion

The factors that influence the image of science in the Russian public mind as they were described in literature can be reduced to the following main groups.

Firstly, the social and cultural tradition related to the development of science in Russia should be mentioned. A number of researchers pointed out that science as a professional activity appeared in Russia during Peter the Great reign, being imported from the Western Europe along with other various reform projects. Thus, the Russian culture regarded science as a European way of dealing with the reality which was not quite natural for the Russian worldview [17]. The Russian philosophy also supported that approach, as it traditionally contraposed wisdom to the scientific truth and book knowledge, distinguishing between the European rationalism and the Russian spiritual openness to Being. Some researchers (e.g., L.B. Bazhenov, A.V. Yurevich) believe that the underlying cultural stereotype, formed due to the described attitudes to scientific knowledge in general, presently continues to affect the public perception of science, in particular, determining the previously mentioned personal distancing from science. Furthermore, the traditional way of regarding science as the government project leads to a partial transfer of the attitude toward government authorities to the attitude to science proper.

Obviously, one of the basic factors of forming the image of science is the actual common presence of science in personal lives and in the society as a whole. We support S.V. Vlasova's point of view who underlined the importance of innovations becoming a part of our daily lives and being perceived by the public as the application and extension of scientific research results [18]: from this point the technological civilization is defined as the scientific one, which also effects the image of science being formed.

At the same time, the economic arrangements underlying the modern lifestyle prompt the public mind to link the objective evaluation of any phenomenon with its financial assessment. From this standpoint, the information about the underfinancing of science in Russia definitely

affects the public image of science. During the 2010s, the level of such financing fluctuated between 1.1% and 1.3% of GDP, while the goal of 2% of GDP is to be achieved only in 2024 that is the year of the 300th Anniversary of the Russian Academy of Sciences. In comparison, the financing of science in France, the USA, Germany over the same period accounted for 2.24%, 2.76%, and 2.9% of GDP accordingly. Being widely discussed, these financial indicators influence the image of science in Russia through implying the lack of social prospects in science as a professional sphere.

The relevant publications do not cast doubt on the important role of education, including primary and secondary school, in the formation of the public image of science: at school children and teenagers learn about the fundamentals of the scientific picture of the world and the scientific methods of cognition. Therefore, when researchers discover systemic distortions in the perception of science by Russian public, i.e., the insufficient scientific awareness or the readiness to percept various parascience theories as scientific ones, the educational system is usually thought to be faulty. Thus, different opinions about school and professional education, based both on public discussions and personal experience, add to the formation of the public image of science.

The mass media play an essential role in altering the current perception of science because the majority of Russian citizens who left schools or graduated from universities further rely on the mass-media discourse to obtain new information about scientific discoveries and developments, as well as the implementation and efficiency of those developments. According to A.V. Yurevich, in the modern world the mass media create the image of reality, including the image of science [19]. He identifies the advent of a certain group of scientists (usually not the leading ones) who are able to and willing to maintain the public discourse in the media. The collective perception of this group of scientists in turn influences the development of the public image of science. At the same time, further transformation of this channel of public communication has been identified. A recent survey on the young scientists' ideas of science, carried out by a group of young researchers, revealed that social networks and blogs are regarded by young people as a key source of knowledge about the development of science in Russia, while the traditional media, i.e., television, radio, newspapers, were not included by the respondents in the list of such sources [20].

Art and literature are other specific channels able to communicate ideas about science and scientists to the public. Originally, two main types of scientist characters used to be widespread in the mass culture: either an absent-minded scientist reflecting on abstract issues, who occasionally becomes the cause of a global threat due to an oversight, or an evil genius who intentionally uses scientific achievements in order to take over the whole world. Gradually, as the role of science in the functioning of a society expanded, more variants of a scientist image appeared. T.V. Saveljeva notes that the idea of images of scientists being limited by the two mentioned stereotypes in the contemporary art and literature is a stereotype itself. Quite often the works of art (particularly, cinematograph) portray scientists, e.g., Indiana Jones or Robert Langdon, as strong characters distinguished not only by their intellectual abilities but also by being physically fit and savvy. These characters represent a typical image of a superman equipped with such an additional feature as specialized knowledge [21]. Through visualization and personification of the notion of science, thus adding an emotional dimension to images of scientists, the contemporary art significantly contributes to the development of the public image of science.

The above-mentioned factors, therefore, contribute to the construction of the public image of science. On the one hand, they reflect to some extent the real history of the development of science, its achievements, the variety of its forms, and its importance for the society. On the other hand, they preserve the range of stereotypes, prejudice and distorted assessments related to science. As we noted earlier, the cultural tradition of the perception of science in Russia has been ambivalent from its very beginning. The undoubted importance of the constant presence of science in the daily life of a society, for which science acts as the artificial second nature or the technical environment, is balanced by “bracketing science” – the phenomenon identified by B. Wynne [22]. When the scientific achievements become an indispensable part of the social reality, people do not directly link their day-to-day practices with the results of scientific research, simply taking for granted fruits of the technical progress. Moreover, due to the significance of science in our daily lives, various problems that people face are often connected with science that is believed to be responsible for finding good solutions. Finally, the economic discourse does not support a definitely positive attitude to science even if it explains the necessity to increase the scientific research financing because it focuses on science as the recipient of public resources and not as a driving force of social development.

The secondary school education is based mainly on the introduction to classical science. Therefore, the basic image of science for most people reflects the characteristic features of the classical period of science, especially in the understanding of the nature and methods of scientific research. However, it does not embrace the specific features of non-classical and post- non-classical periods. Some stereotypes related to science are persistent even under the essential transformation of social conditions and principles of organizing scientific work, e.g., the public belief that the main purpose of scientific activities is the explanation of collected or spontaneously obtained empirical facts. In the professional scientific methodology, though, one of the key elements defining the transition to the non-classical stage of science is the abandoning of pure empirical research programs. Thus, the public image of science implies a certain degree of inertia caused by the initial shaping of this image at the stage of school education.

The mass media processing the information to be communicated are aimed at picking up messages that reach out of the daily routine and further focusing on specific details in order to attract the public interest. The mass media priority is selecting extraordinary facts or happenings and ignoring the routine ones. This factor is able to partially distort the public image of science due to the limited competence of reporters in interpreting the scientific findings and results while engaging in scientific discourse. Moreover, the inevitable multiplication of personal assessments and generalizations in the flows of information inevitably leads to stereotyping.

As a result, the image of science in the Russian public mind is characterized by its ambivalence, a specific mixture of scientism and anti-science attitudes and evaluations where the respect to scientific knowledge is combined with a complex of fears and disappointments related to science. Some researchers (e.g., Volodarskaya E.A.) identify a number of gaps within the public image of science in Russia: between the perception of science in general and the perception of Russian science and scientists that is partially negative; between the attitudes to fundamental and applied sciences, which reveal insufficient understanding of the need and conditions for the development of fundamental scientific research; between the explicitly declared positive attitude to science and the implicit negative evaluation of its importance; between the attitudes to different fields of scientific knowledge resulting from the limited awareness of their contents; etc. [23].

The persistence of such characteristics of the image of science in the Russian public mind was proved by our local research in 2021. As it was mentioned, the empirical ground for the research was a discussion on the local news site about the level of pay for scientific work that would be fair. The study considered and evaluated comments to three most popular articles dealing with the matter. The opinions of people who left comments varied from the highest evaluation of science (“It creates great things for millions of people”) to the complete denial of usefulness of science for the society. About 25% of all comments were defined as expressing an unambiguously positive or negative attitude of science and scientists; other comments of more complicated or general nature were regarded separately and did not add to our estimates. Among the comments in the first group, around 57% contained positive estimates of the current level of pay received by scientists for their professional work. The typical arguments were as follows: “Scientists contribute significantly to the development of our country, therefore they deserve relevant pay”; “Our scientists received the award for really complicated and important work”; “A scientist’s salary should be high, so that the best minds could engage in scientific work”. On the other hand, around 43% of the comments contained negative assessments. They insisted that the work of scientists is not more important for the society than work of any other professionals, for that reason it is unclear why scientists should get higher pay. Some comments stated that the work of scientists does not require much effort, as it is mainly “sitting on a chair and having tea with colleagues”. The dominant reasons were: “Science does not pay back on the investment”, “Scientists are of no use”, “Over the years they have not invented anything valuable for the future”. After an article extremely critical of the work of scientists was published on the same site, a voting was carried out that resulted in a similar proportion of positive and negative assessments: around 40% of participants supported the author’s point of view, while about 60% opposed it. However, both proponents and opponents expressed the belief that foreign scientists enjoyed better conditions of work than their colleagues in Russia. The participants who were positive about the scientific work expressed their concern that our scientists could decide to move abroad because of constant underpayment at home. Those who wrote negative comments pointed out that if those scientists had not left Russia so far, they obviously were not really good scientists. However, both groups agreed that moving abroad is a reasonable decision for any successful scientist. It

is possible to conclude that such point of view was the outcome of regular disputes regarding the brain drain issue over the previous years: the local public eventually stopped worrying about it, which implicitly assumes that the public mind does not perceive science as a resource that is vital for the sustainable development of the country.

Creating however a momentary picture, the results of our research clearly demonstrate the persistence of ambivalence of the public perception of science in Russia which includes both scientism and anti-science attitudes. It should be pointed out, though, that only a small proportion of local citizens took part in the debate. The high level of stereotyping, which was typical of both groups (especially the anti-science one) and the unwillingness of the participants who expressed their negative attitude to science to consider and somehow to adjust their stereotypes, e.g., to obtain information about the actual current state of science, should be underlined. Such updated information could include facts about the actual work of contemporary researchers in contrast with the images received by the audience many years ago while watching Soviet fiction films about scientists. However, a significant number of people still rely on the outdated ideas in spite of the fact that since the collapse of Soviet Union the whole system of labour relations in Russia has undergone significant changes. Moreover, the phenomenon of bracketing science is still persistent. The public belief that over many years scientists have not developed anything useful demonstrates the lack of awareness of the way in which all technological attributes of our civilization result from the scientific progress. The attitude to science as a pure recipient of financial resources supports the perception of science as a non-promising field for a professional career. Another general feature of the public perception of science is clear misunderstanding of the nature of scientific research. People do not usually realize that the essence of science is the exploration of the unknown, the future-oriented intellectual activity driven not only by short-term practical issues, but by the striving for gaining new knowledge, the willingness to overcome ignorance, the desire to comprehend the various aspects of the universe. Therefore, one should not expect rapid payback for investments from scientific research. Thus, the ideology of the evaluation of science on the basis of its short-term efficiency and the expectation of quick return on investment, which was demonstrated even by those supporting science, sets limits to and distorts the social conditions for the development of science.

The public attitude to science has an impact on the choice of it as a professional career by university graduates, in particular, it affects students' motives for doing post-graduate courses or involving in scientific research. Some recently published results of surveys conducted among young people who made their choice in favour of scientific careers [24; 25], as well as our own findings about reasons for such a choice, allow to identify the following trends:

- the external reasons for choosing a scientific career, including the salary and prestige, are less typical these days. Obviously, young people were disillusioned by the public discourse over the last decades, which allows to view their choices as more rational. In the future, though, it might prevent talented graduates from engaging in professional scientific research. Added to that, a motivation for career growth still exists, which is an external factor related to the scientific work proper;
- quite common motivation for scientific activities is the curiosity and understanding of personal aptitude for gaining new knowledge. In other words, the perception of science as a mission remains important even though it has become an ordinary occupation. However, the same motive is also a reason for choosing post-graduate studies as a way to prolong training, to stay in a familiar university environment, and to continue gaining knowledge as opposed to generating it;
- factors of personal nature, including the influence of a scientific supervisor, the involvement in scientific research of a department/laboratory, the positive experience of participation in scientific conferences greatly contribute to the choice of graduates in favour of a scientific career. Such factors make choice more rational, which actually is the usual way of a scientific school functioning. However, this can become an implicit barrier for academic mobility. In 2003, S.S. Balabanov and his colleagues identified the trend toward "territorial limitation" in Russian science [26]. At present, a trend toward functioning of some scientific schools within their own framework can be identified;
- a number of graduates now consider the scientific occupation to be just a temporary choice in order to make up their mind later, so young people enter graduate and postgraduate studies simply in the absence of other promising career options. They do not actually choose science as their professional field, thus, the problem of

self-determination and understanding one's real motivation to begin a career in science is not solved, but postponed.

Conclusion

The identified trends should be taken into account when arranging the participation of young researchers in scientific activities. These trends also require further studying in dynamics. The image of science in the contemporary culture should become an object of the purposeful social construction instead of the spontaneous emergence. Above all, the ambivalent image of science in the Russian public mind can be regarded as an unlimited sphere of opportunities for its development in different directions. We consider the developing of a thoughtful set of government policies to be necessary not only in relation to science proper, but also in relation to the dominant ideas about it in the contemporary Russian culture. In our opinion, the key ideas that could form the basis of the image of science are the following:

- the development of science made possible the material and technical convenience of our daily lives with all those attributes that many people take for granted;
- scientific research that cannot guarantee the immediate return on investment today may prove to be vital in the future. The fundamental scientific research is the only possible basis for the applied research and development;
- science does not just consume social resources, on the contrary, it creates new resources and enlarges their amount;
- science in general is diverse, it includes many thematic areas and forms of activity. Therefore, it provides a person with one of the widest fields for self-realization and application of their creative abilities. At the same time, scientific work requires a high level of preparedness, dedication, specific personal skills and qualities. The real science is not just a pastime for those who are not engaged in practical work but an intellectual labour that not everyone is capable of, which deserves particular respect.

References

1. Kasavin IT. Nauka – gumanisticheskij proekt [Science is a humanistic project]. Moscow, Ves' mir Publ.; 2020. 496 p.
2. Elkana Y. A Programmatic Attempt at an Anthropology of Knowledge. Sciences and Cultures: Anthropological and historical studies of the sciences / In Mendelssohn E, Elkana Y, eds. Boston: D. Reidel Publ. Co.; 1981. p. 1-76.

3. Ogurcov AP. Obrazy nauki v burzhuaznom obshchestvennom soznanii [Images of science in the bourgeois public consciousness]. *Filosofiya v sovremenno mire. Filosofiya i nauka* [Philosophy in the modern world. Philosophy and Science]. Moscow, IFRAN Publ.; 1972. p. 315-49.
4. Mironov VV. Obrazy nauki v sovremennoj nauke i filosofii [Images of science in modern science and philosophy]. Moscow, Gumanitarij Publ.; 1997. 254 p.
5. Terpilovskaya EA. Obraz nauki kak koncept v otechestvennoj filosofii [The image of science as a concept in Russian philosophy]. *Istoriya i filosofiya nauki: Sbornik statej po materialam Vserossijskoj nauchnoj konferencii* [History and Philosophy of Science: Collection of Materials of the Russian Sc. Conf.]. Uliyanovsk, Kachalin Publ.; 2012. p. 129-32.
6. Kugel SA, Maisel IA. Obraz nauki v obshchestvennom mnenii (sotsiologicheskii aspekt) [The image of science in the public opinion (sociological aspect)]. *Vestnik Rossijskoj akademii nauk* [Bulletin of Russian Academy of Sciences]. 1992;11:20-29.
7. Golov AA. Otnoshenie naseleniya k nauke [Public attitudes towards science]. *Informacionnyj byulleten'. Ekonomicheskie i social'nye peremeny: Monitoring obshchestvennogo mneniya* [Newsletter. Economic and Social Change: Monitoring Public Opinion]. Moscow, Aspekt-Press Publ.; 1995. p. 48-50.
8. Shuvalova OR. Prestizh professii uchenogo v mire i v Rossii [The prestige of the profession of a scientist in the world and in Russia]. *Naukovedcheskie issledovaniya* [Scientific research]. Moscow, RAN, INION Publ.; 2015. p.19-41.
9. Gokhberg L, Shuvalova O. Russian public opinion of the knowledge economy: Science, innovation, information technology and education as drivers of economic growth and quality of life [Internet]. The British Council; 2004. Available from: <http://www.hse.ru/data/2010/01/27/1238496966/maket.pdf>
10. Shmatko MV. Obraz nauki v massovom soznanii sovremenno go rossijskogo obshchestva [The image of science in the mass consciousness of modern Russian society]: Thesis for the degree of PhD in Philosophy. Omsk, Omsk State Technical University Publ.; 2008. 187 p.
11. Rashidova MR. Sociokul'turnye osnovaniya konstruirovaniya obrazov nauki [Socio-cultural foundations for the construction of images of science]: Thesis for the degree of PhD in Philosophy. Novosibirsk, Novosibirsk State University Publ; 2005. 189 p.
12. Aminem RJ, Ast HD. Review of Constructivism and Social Constructivism. *Journal of Social Sciences, Literature and Languages*. 2015;1(1):9-16.
13. Martishina NI. Konstruktivistiskaya issledovatel'skaya programma v social'no-gumanitarnom znanii [Constructivist research program in social and humanitarian knowledge]. *Vestnik OmGPU: Gumanitarnye issledovaniya* [Bulletin of Omsk State Pedagogical University: Humanitarian research]. 2015;2(6):19-23.

14. Kasavin IT. Social'naya epistemologiya: fundamental'nye i prikladnye problem [Social Epistemology: Fundamental and Applied Problems]. Moscow, Alfa-M Publ.; 2013. 569 p.
15. Martishina N, Taskaeva E. The value of science as a world-view problem in the contemporary culture. In: Sibgatullina-Denis I, P Max Hacker S, Vančová A, Kirsha A, editors. Sustainability of Science in a Post-Covid World: Monograph [Internet]. Vienna: IfII Institut für Intellektuelle Integration; 2021 [cited 2021 Dec 1]. p. 35-48. Available from: <https://phaidra.univie.ac.at/view/o:1376736>
16. Yurevich AV. Neravnoe neravenstvo: rassloenie rossijskogo nauchnogo soobshchestva [Unequal inequality: stratification of the Russian scientific community]. Naukovedenie [Science on Science]. 2002;3:57-74.
17. Bazhenov LB. Analiz antiscentistskikh tendencij v obshchestvennom soznanii [Analysis of anti-scientist tendencies in the public consciousness]. Problema cennostnogo statusa nauki na rubezhe XXI veka [The problem of the value status of science at the turn of the XXI century]. St. Petersburg, Publ. by the Russian Christian Humanitarian Institute; 1999. p. 209-21.
18. Vlasova SV. Obraz nauki v obshchestvennom soznanii [The image of science in the public consciousness]. Vestnik MGTU [Bulletin of Murmansk State Technical University]. 2004;7(1):106-14.
19. Yurevich AV. Nauka pri mediakratii [Science in Mediocracy] Naukovedenie [Science on Science]. 2002;1:69-85.
20. Yakovleva AF, Selezneva AV, Emelyanova NN. Obraz nauki v predstavleniyah molodyh uchenyh: sociokul'turnye izmereniya [The image of science in the views of young scientists: social and cultural dimensions]. ПРАЭНМА. Problemy vizual'noj semiotiki [Journal of Visual Semiotics]. 2020; 4(26):195-213.
21. Savelieva TV. Medijnyj obraz uchenogo – fol'klorista, etnografa, antropologa, lingvista (na materiale rossijskikh i zarubezhnyh kinofil'mov). [The media image of a scientist - folklorist, ethnographer, anthropologist, linguist (based on Russian and foreign films)] Znak: problemnoe pole mediaobrazovaniya [Sign: problematic field of media education]. 2018;2(28):216-20.
22. Wynn B. Knowledge in context. Science, technology and human values. Cambridge (Mass.), 1991;16(1):111-21.
23. Volodarskaya E. A. Predstavleniya ob uchenyh v sovremennom rossijskom obshchestve (opyt social'no-psihologicheskogo issledovaniya) [Ideas about scientists in modern Russian society (experience of socio-psychological research)]. Naukovedenie [Science on Science]. 2001;2:121-31.
24. Laptsev VV, Pisareva SA, Tryapitsyna AP. Uchenaya stepen' v Rossii: problemy i perspektivy [Degree in Science in Russia: Problems and Prospects]. Vyssee obrazovanie v Rossii [Higher Education in Russia]. 2013;4:26-37.

25. Nikulina IV. Motivy uchebnoj deyatel'nosti obuchayushchihhsya v magistrature [Motives of educational activities of students in the magistracy]. Yaroslavskij pedagogicheskij vestnik [Yaroslavl Pedagogical Bulletin]. 2019;6(111):137-43.
26. Balabanov SS, Bednyi BI, Kozlov EV, Maksimov GA. Mnogomernaya tipologiya aspirantov [Multidimensional typology of graduate students]. Sociologicheskii zhurnal [Sociological journal]. 2003;3:71-85.



DIGITAL COMPETENCE OF MODERN STUDENTS

Svetlana Fedorova, Natalia Golikova, Anna Novikova

Abstract. The authors of the article noted that the rapid pace of new technologies development observed recently, and also the active informatization and digitalization of society, impose new requirements for the future specialist in terms of his compliance with the modern labor market, for lifelong learning and self-education. The digital competence is of fundamental importance for graduates' success at work in a digital networked economy; therefore this article reveals the main approaches to the definition of the term "digital competence". Different researchers consider it differently: either as the ability to use information and communication technologies, as a part of social competence, as a way of communication in the digital space, etc. Authors emphasized that the terms such as "digital competence", "information literacy" and "media literacy" are considered as not identical. Also in this article there are the results of a diagnostic study conducted on the basis of the Federal State Budgetary Educational Institution of Higher Education "Mari State University" (Yoshkar-Ola) with students of various specialties and, which are analyzed in detail to identify their level of digital competence. The results of this study indicate that students have a positive view of the digital transformation of education and note that the "adaptability of educational material" is an advantage in the use of digital technologies in education.

Keywords: digitalization, higher educational institution, educational process, digital competence, students, digital technologies.

Relevance. The rapid pace of new technologies development observed recently, and the active informatization and digitalization of society impose new requirements for the future specialist in terms of his compliance with the modern labor market, for lifelong learning and self-education [1]. The digital competence is of fundamental importance for graduates' success at work in a digital networked economy.

Scientific significance. It should be noted that the term of "digital competence" is the most recent concept gained a great popularity and there are already a lot of studies that reveal its various aspects. But, as usual, unfortunately, the abundance of different definitions leads to the blurring of the boundaries of the concept and the lack of a single designation of its essential semantic characteristics. It can be treated differently not only in the studies of scientists, but also in program documents of different countries. Let's trace the dynamics of its development.

It is commonly thought that the term "digital competence" has replaced the previously accepted concepts such as "information literacy"

and “media literacy” [2]. But today it hardly seems likely, because these concepts have different semantic meanings and are not interchangeable. The focus of digital competence is primarily on the effective engagement with digital tools; while the concept of information literacy is built around the ability to perform different operations with information; and the core of media literacy is the ability to work with media and media content [3].

In general terms, G.U. Soldatova and E.I. Rasskazova considered digital competence as a part of social competence that should be analyzed through understanding knowledge, skills, beliefs, motivation and behavior on the Internet [4].

G.V. Petruk and N.A. Kleshcheva supposed that digital competences are the basis of a person’s ability to solve various problems in using communication technologies [5].

E. Gallardo-Echenique, J. Minelli de Oliveira, L. Marques-Molias, F. Esteve-Mon believed that digital competence as the technical use of ICT, knowledge application or 21st century skills [6].

On the contrary, A. Cattaneo, C. Antonietti and M. Rausedo said that digital competence is a key competence for lifelong learning, a basic required competence for citizens to fully participate in civic, social and professional life [7].

According to L. Ilomyaki, A. Kantosalu, M. Lakkala, digital competence consists not only of digital skills but also social and emotional aspects for using and understanding digital device [8].

The European Commission has defined digital competence as involving the confident and critical use of Information Society Technology for work, leisure and communication [9].

In regard to education, R.J. Krumsvik considers digital competence as the ability of educators to use information and communication technologies (ICT) in a professional context, combined with a good pedagogical (didactic) understanding and awareness of its importance for learning strategies and the digital base of students [10].

J. Kullaslahti, S. Ruhalahti, S. Brouwer considered digital competence in the same vein: a combination of professional or substantial, pedagogical and technological expertise [11].

And R.A. Baryshev et al. believed that digital competence is defined as the student’s high-level ability to communicate in the digital space (highly mobile intelligent devices, smart technologies, network professional communities) with the goal of self-realization and continuous innovative development [12].

S.A. Gryaznov believed that digital competence includes not only what an educator should take responsibility for, but is also a part of the process of digitalization of the entire university; involves more than knowledge how to use devices and applications; it is inextricably linked to communication skills using ICT (information and communication technology) as well as information skills [13].

If we speak about the digital competence of students, it should be noted that N.P. Yachin and O.G. Fernandez considered that this competence is based on logical thinking, a high level of information management and highly developed mastery of digital technology [14].

D.A. Mezentseva understood the concept of “pedagogical digital competence” as “a complex of knowledge, skills, and attitudes that enable an instructor to make informed and appropriate choices regarding the usage of digital tools and related teaching methods and strategies in a certain educational context, which leads to the improvement of the learning process and satisfaction of learners’ and instructor’s needs” [15, 90].

Considering pedagogical digital competence, E. Insteffjord and E. Munte note that it is “a combination of “hard skill” and “soft skill” components: “the ability to integrate and use technology for educational purposes as well as having more generic skills suitable for all situations, both personal and professional” [16].

Thus, as we presume, digital competence should be understood as the ability to use information and communication technologies, as a part of social competence, and also as a way of communication. All this shows that digital, information, and communication technologies have become an integral part of both the personal and professional life of every person.

Considering the digital transformation of the education, in our opinion it should be noted that all participants in the educational process, particularly university educators and students should have digital competence. With this aim, a huge number of advanced training programme, additional educational programs are being developed, and specialized disciplines are being introduced into the educational process.

Within the framework of the project “Pedagogical personnel for the digital economy”, FSBEI HE “Mari State University” (Yoshkar-Ola) diagnostics of the level of educators’ digital competence in the university is regularly conducted, and as a result of this analysis, the strengths, and

weaknesses in the training of educators are indicated, and the ways of improving their digital competence are outlined.

The digital competence of students should be formed during the courses of specialized digital disciplines, additional courses, as well as by using digital technologies and electronic services. In our opinion, one of the main conditions for the student's digital competence development at a university is construction of personal learning environment [17].

Research results and conclusions. In order to evaluate the initial level of digital competence, we conducted a social survey with students of the Mari State University (Yoshkar-Ola). In total, 107 students of various fields of training took part in this study. The results of the study revealed the following:

1. Answering the first question about the essence of digital culture ("Digital culture is ..."), 75% of respondents chose the answer "a set of principles and competencies that characterize the preferential use of information and communications technologies for interaction with society and solving problems in professional activities", 19% of respondents decided that digital culture is "a set of measures aimed at protecting data confidentiality, integrity and availability of information from virus attacks and unauthorized interference", and 6% - "rules of conduct adopted in a particular society and adapted in the digital environment" (Fig. 1.).

1. "Digital culture is..."

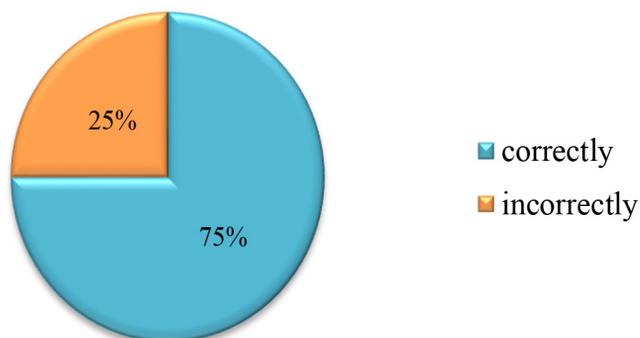


Fig. 1. Percentage of answers for question 1

2. Regarding the second question “What components are not included in the concept of digital literacy?” 52% of the respondents answered correctly by choosing the option “spelling literacy”, 24% of the respondents chose the option “communicative literacy”, 14% - “media literacy”, and 10% - “information literacy” (Fig. 2.).

2. "What components are not included in the concept of digital literacy?"

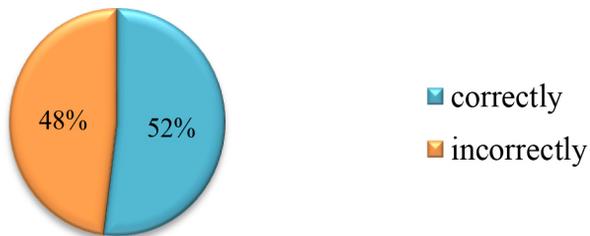


Fig. 2. Percentage of answers for question 2

3. Analysis of the answers to the third question “Express your attitude to the digital transformation of education” showed the following: 60% of respondents express a “positive” attitude to the digital transformation of education, 33% – “neutral”, and 7% – “negative” (Fig. 3.).

3. "Express your attitude to the digital transformation of education"



Fig. 3. Percentage of answers for question 3

4. Analyzing the answers to the fourth question “The advantages of digital technologies in education”, we came to the conclusion that only 2% of respondents were able to determine an combination of correct op-

tions: “adaptability of the educational material”, “facilitation of the educator’s work” and “controllability of the students’ individual work during extracurricular time”. Considering each option separately, we obtained the following results: 68% of respondents answering this question chose the option “adaptability of educational material”, 65% – “interactivity (interaction with a student that imitates natural communication)”, 58% - “facilitation of educator’s work “, 54% – “savings for the purchase of teaching aids”, 47% – “controllability of the students’ individual work during extracurricular time”.

5. Analyzing the fifth question “What impact do you think the digital technologies have on the learning process?” We got the following results: 67% of respondents believe that the digital technologies have a “positive” impact on the learning process, 23% – “no influence”, 10% – “negative”. This means that the majority of students confirm that the digital technologies have huge didactic possibilities and their potential requires wider application in the educational process of the university [18].

6. Answering the sixth question “What is phishing?”, 81% of respondents chose the correct answer “a type of fraud in order to gain access to confidential users’ data – logins and passwords”, 10% of respondents decided that phishing is “the creation of free programs ”, 6% – “correspondence from a stranger to extort money”, and 3% – “free anti-virus application to unlock the computer”.

7. Answering the seventh question “During registering on the website, you were asked for a phone number. What variant of following is the safest? 84% of respondents answered correctly, choosing the option “You are registering on a large and well-known online resource, for example, on mail.ru”, 4% of respondents considered another answer to be correct – “You are making an online purchase for the first time on the website that has positive reviews from other users”, 2% – “You want to download a new movie on a file sharing service, and you are required to register in a pop-up window”, and 10% of respondents believe that entering a phone number is safe “in all variants mentioned above” .

8. Analysis of the answers of the eighth question “Is that a form of social provocation or bullying in network communication, which is used both by personalized participants interested in greater recognition, publicity, outrageousness, and by anonymous users without the possibility of their identification?” showed that 55% of respondents answered this question incorrectly, and only 45% correctly identified that as “trolling”.

9. To the ninth question “What will you do if you suspect that an email from a person you know contains a virus?” 65% of the respondents answered correctly, choosing the option “You won’t open the letter and tell the sender that his computer is infected with a virus”, 15% of the respondents chose the option “You ask a computer specialist what to do”, 10% – “You disconnect from the Internet, and then open letter”, 7% – “You send the message back without opening”, and 3% – “You open the letter because it is from a person you know”.

10. Answering the tenth question “Choose the correct email address”, 94% of respondents chose the correct option “olga05@mail.ru”, 5% chose another option – “olga@olga.ru”, and 1% – “olga!?.mail.ru”.

11. Analysis of the eleventh question “What do the characteristics of the “digital footprint” of a person include” showed that only 5% of respondents were able to determine a combination of correct options “the result of a digital presence and trail of data person leave when using his devices”, “data used for analysis of person’s behavior” and “data from video recordings from public places.” The “digital footprint” and “digital shadow” are the terms that should be well known to every user [19]. Considering each option separately, we obtained the following results: 82% of respondents, answering this question, chose the option “the result of a digital presence and trail of data person leave when using his devices”, 36% – “data used for analysis of person’s behavior”, 35% – “collected data are not about the user, but about his devices”, 32% – “data from video recordings from public places can be sources”, 17% – “data are formed against the will of the device user”.

12. Answering the twelfth question “Is it true that digital literacy is a complex set of skills, for the development of which it is enough to update the educational program or technical equipment?” 58% of the respondents answered “true”, and that is the wrong answer. It is an illusion of digital competence associated with the superficial development of online activities [20]. 42% of respondents chose the correct option “wrong”.

13. Answering the thirteenth question “Which of the following passwords, in your opinion, is the most secure?” 89% of respondents chose the correct answer “QwE321rTy759”, 5% of respondents chose “qwerty”, 5% of respondents chose another option “qwe123rty456” and 1% – “09874587324”.

14. An analysis of the fourteenth question “The type of malicious software capable of infiltrating the code of other programs, system memo-

ry areas, boot sectors, and also distributing its copies through various communication channels” showed that 72% of respondents answered correctly, indicating it as “virus”, 28% answered incorrectly.

15. Analysis of the answers of fifteenth question “You need to transfer a certain data file via the Internet. What services will permit you to do this?” showed that 19% of respondents were able to identify a combination of options correctly: cloud storage, webmail client and web messenger (Mail Agent, ICQ, Viber, etc.). Considering each option separately, we got the following results: 76% of respondents, answering this question, chose the option “web messenger (Mail Agent, ICQ, Viber, etc.)”, 58% – cloud storage, 45% is Web Email Client, 13% is Firewall, 10% is Google Translator, and 9% is Geolocation Service.

16. Analysis of the sixteenth question “Choose archiving software from the proposed list” showed that 27% of respondents were able to determine the combination of the correct options: “WinRar”, “WinZip” and “7-Zip”. Considering each option separately, we got the following results: 52% of respondents, answering this question, chose the option “WinRar”, 51% – “WinZip”, 51% – “Yandex Disk”, 48% – “7-Zip”, 19% – “Microsoft Word”, 6% – “MP Navigator EX”, 5% – “CCleaner”, 5% – “Punto Switcher”.

17. Answering the seventeenth question “What is a browser?”, 78% of respondents chose the correct option “a program for browsing Internet pages”, 16% of respondents decided that a browser is “a program for storing and processing large amounts of data”, and 6% – “program for sending and receiving e-mail”.

18. The eighteenth question, “Which keyboard shortcut selects all objects at once, such as folders, files, text, etc.?” 61% of respondents answered correctly “key combination Ctrl+A”, 22% of respondents chose “key combination Ctrl+C”, and 17% “shortcut key Ctrl+V”.

19. Analyzing the nineteenth question “Do you use consulting services in your educational activities?” we got the following results: 42% of the respondents “have never been interested in this issue”, 38% of the respondents do not use these services, and 20% of respondents use the consulting services. Our earlier diagnostic study (2021) showed that only 8% of respondents used the services of consulting organizations, which indicates that consulting services among students are becoming more and more popular and in-demand [1].

20. Analysis of the twentieth question “What consulting services in the education, in your opinion, should be provided in digital format in

order to facilitate successful learning process?” showed the following results: 55% of respondents, unfortunately, could not answer this question; 45% of respondents shared their views, answering this question as follow: 28% of respondents believe that it is necessary to provide assistance to students in digital format through online consultations, providing lecture and seminar recordings, as well as duplicating information in electronic form; 11% of respondents believe that it is necessary to create online courses and online schools in digital format, as well as conduct lectures and training remotely; 4% of respondents believe that in order to work in a digital format, it is necessary to organize courses to improve the digital literacy of educators; 1% of respondents believe that joint work of students should be organized in digital format; 1% of respondents emphasized their negative attitude toward the digital transformation of education.

Based on the results of the survey, we received the following results of the levels of students’ digital competence: high – 42% of respondents, medium – 51% and low – 7%. The results are presented in Figure 4.

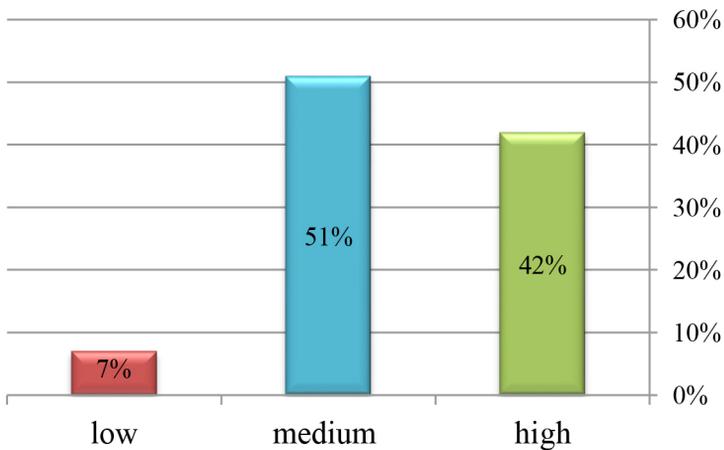


Fig. 4. The level of students’ digital competence

Thus, on the basis of the presented analysis of the results of the social survey aimed at the students’ digital competence identification, the following conclusions can be drawn: 60% of respondents express a “positive” attitude towards the digital transformation of education; 68% of respondents believe that “adaptability of educational material” is an ad-

vantage in the use of digital technologies in education; 67% of respondents confident that the use of digital technologies has a “positive” impact on the learning process; 42% of respondents have never been interested in the consulting services on the Internet, but at the same time, 20% of respondents use the consulting services; 28% of respondents sure that in digital format it is necessary to provide assistance to students through online consultations, providing recordings of lectures and seminars, as well as duplicating all information in electronic form; 11% of respondents feel certain that it is necessary to create online courses and online schools in digital format, as well as conduct lectures and training remotely; 51% of respondents have an average medium level of digital competence.

References

1. Rzhavina ND, Fedorova SN. Consulting structure and directions of educational consulting at the university [Internet]. Modern problems of science and education; 2021 [cited 2022 Jan 16]; 5. Available from: <https://doi.org/10.17513/spno.31071>
2. McGarr O, McDonagh A. Digital Competence In Teacher Education. Oslo: Oslo Metropolitan University; 2019. 50 p.
3. Koltay T. The Media and the Literacies: Media Literacy, Information Literacy, Digital Literacy [Internet]. Media, Culture and Society; 2011 [cited 2022 Feb 8]; 33(2):211-221. Available from: <https://doi.org/10.1177%2F0163443710393382>
4. Soldatova GU, Rasskazova EI. Assessment of the digital competence in Russian adolescents and parents: digital competence index [Internet]. Psychology in Russia: State of the art; 2014 [cited 2022 Feb 8];7(4):65–74. Available from: <https://doi.org/10.11621/pir.2014.0406>
5. Petruk GV, Klescheva NA. Competencies Of A Contemporary Employee In The Age Of Digitalization [Internet]. International Scientific Conference - Amurcon 2020. European Publisher; 2021 [cited 2022 Jan 16]; 111:724-730. Available from: <https://doi.org/10.15405/epsbs.2021.06.03.97>
6. Gallardo-Echenique EE, Valls CD, Oliveira JM, Marqués-Molias L, Esteve-Mon FM. Digital Competence in the Knowledge Society [Internet]. MERLOT Journal of Online Learning and Teaching (JOLT); 2015 [cited 2022 Jan 16]; 11(1). Available from: https://jolt.merlot.org/vol11no1/Gallardo-Echenique_0315.pdf
7. Cattaneo A, Antonietti C, Rauseo M. How digitalised are vocational teachers? Assessing digital competence in vocational education and looking at its underlying factors [Internet]. Computers & Education; 2022 [cited 2022 Jan 17]; 176. Available from: <https://doi.org/10.1016/j.compedu.2021.104358>
8. Ilomäki L, Kantosalo A, Lakkala M. What is digital competence? [Internet]. In Linked portal. Brussels: European Schoolnet; 2011 [cited 2022 Jan 17].

Available from: https://www.researchgate.net/publication/266852332_What_is_digital_competence_In_Linked_portal_Brussels_European_Schoolnet_httplinkedeurwebguestin-depth3

9. Punie Y, Cabrera M, Bogdanowicz M, Zinnbauer D, Navajas E. The Future of ICT and Learning in the Knowledge Society [Internet]. Luxembourg: Office for Official Publications of the European Communities; 2006 [cited 2022 Jan 17]. 87p. Available from: <https://op.europa.eu/en/publication-detail/-/publication/03e680c0-5b65-4b91-92e9-20b59a7da904>
10. Krumsvik RA. Digital competence in Norwegian teacher education and schools [Internet]. *Högre Utbildning*; 2011 [cited 2022 Jan 17];1(1):39-51. Available from: <https://hogreutbildning.se/index.php/hu/article/view/874>
11. Kullaslahti J, Ruhalahti S, Brauer S. Professional Development of Digital Competences: Standardised Frameworks Supporting Evolving Digital Badging Practices [Internet]. *Journal of the SFU. Humanities*; 2019 [cited 2022 Jan 17]; 2:175-186. Available from: <https://doi.org/10.17516/1997-1370-0387>
12. Baryshev RA, Kasyanchuk EN, Tsvetochkina IA, Babina OI. Formation of digital competences of university library users [Internet]. *Journal of Siberian Federal University. Humanities & Social Sciences*; 2021 [cited 2022 Jan 17]; 9:1420–1431. Available from: <https://doi.org/10.17516/1997-1370-0792>
13. Gryaznov SA. Digital competence of the teacher [Internet]. *ASR: pedagogy and psychology*; 2021 [cited 2022 Jan 17];2(35):79-81. Available from: <https://doi.org/10.26140/anip-2021-1002-0016>
14. Yachina NP, Fernandez OGG. Development of digital competence of the future teacher in the educational space of the university [Internet]. *Bulletin of the VSU. Series: Linguistics and Intercultural Communication*; 2018 [cited 2022 Feb 8];1:134-138. Available from: <https://dspace.kpfu.ru/xmlui/handle/net/131748>
15. Mezentceva DA, Dzhavlah ES, Eliseeva OV, Bagautdinova ASH. On the Question of Pedagogical Digital Competence [Internet]. *Higher Education in Russia*; 2020 [cited 2022 Feb 8]; 11:88-97. Available from: <https://doi.org/10.31992/0869-3617-2020-29-11-88-97>
16. Instefjord E, Munthe E. Preparing Pre-Service Teachers to Integrate Technology: An Analysis of the Emphasis on Digital Competence in Teacher Education Curricula [Internet]. *European Journal of Teacher Education*; 2016 [cited 2022 Feb 8]; 39(1):77-93. Available from: <https://doi.org/10.1080/02619768.2015.1100602>
17. Prikhodko OV. Features of the formation of digital competence of university students [Internet]. *ASR: pedagogy and psychology*; 2020 [cited 2022 Feb 8];1(30). Available from: <https://doi.org/10.26140/anip-2020-0901-0055>
18. Fedorova S, Ivanova D, Balysheva K. Digital technologies in civic and patriotic education of students [Internet]. *E3S Web of Conferences*; 2021 [cited 2022 Feb 8]; 273. Available from: <https://doi.org/10.1051/e3sconf/202127312054>

19. Eltemerov AA, Fedorova SN. Digital competencies of university cadets of the Ministry of Emergency Situations of Russia [Internet]. *Pedagogical Review*; 2021 [cited 2022 Feb 8]; 3(37):64-71. Available from: <https://doi.org/10.23951/2307-6127-2021-3-64-71>
20. Soldatova GU, Rasskazova EI. Models of digital competence and online activities of Russian teenagers [Internet]. *National Psychological Journal*; 2016 [cited 2022 Feb 8]; 2(22):50-60. Available from: <https://doi.org/10.11621/npj.2016.0205>



AN INTEGRATED APPROACH TO THE PROFESSIONAL AND PERSONAL FORMATION OF THE STUDENT IN THE INFORMATION AND EDUCATIONAL ENVIRONMENT OF THE UNIVERSITY

Elena Alekseeva, Elvira Vorontsova

Abstract. The relevance of the article is due to the problem of the professional and personal development of a student in the context of the development of the information and educational environment of the university based on an integrated approach. The spread of COVID-19 has contributed to changes in the economic and social life of populations around the world. Changes also influenced the field of education. One of the consequences of this phenomenon is the increased implementation of digital technologies in the educational process, in particular, the issue of improving the information and educational environment of the university, contributing to the professional and personal development of the student on the basis of an integrated approach, became topical. Under the new conditions, it is important to maintain and develop a high quality of education, ensure the availability of educational services, prepare students to use information technology in an open digital society. The article presents the components of the information and educational environment of the Mari State University, in which it provides students as subjects in their activities (educational, research, professional, etc.) with such conditions and opportunities, ensuring professional and personal development of the student in the process of learning at the university, thus improving the efficiency of the education system as a whole.

Keywords: information and educational environment, electronic information and educational environment, electronic learning resource, platform, integrated approach, professional and personal development.

In the Russian education system, the issue of professional and personal development of students in the new information and educational environment of the university is topical. Higher educational institutions see the solution to this problem in improving, first of all, the quality of the educational process, educational work and youth policy, increasing the efficiency of research work by modernizing the material and technical base, and improving the information educational environment of the university. It is through the main activities in the educational, training, scientific directions with the use of modern means that the personal development of students is effectively carried out, their relationships,

motives, intellect, emotional-volitional sphere develop, thereby mainly determining the professional development. And in turn, the level of professional achievements of a student is determined by personal characteristics. A.A. Bodalev believes that the personal development of a person is more intensive than professional. This is manifested in a careful attitude to the environment, people, objects of material and spiritual culture, attachment to the family, etc. Physical health, professional achievements are in the background [1]. Most scientists argue for a simultaneous purposeful professional and personal development of students. In the psychological and pedagogical researches of domestic scientists E.F. Zeer, G.S. Korytova, O.A. Cherkasova professional and personal development is considered according to leading activities in a professional educational institution, where, in addition to professional knowledge, skills and abilities, professionally important personal qualities (erudition, goal-setting, practical and diagnostic thinking, intuition, observation, foresight and reflection) form [2]. I.A. Zimniaia considers students as “a separate social category, a specific community of people who are united by the institute of higher education with the help of a structured organization” they are characterized by “high educational level and cognitive motivation, intellectual and social maturity, social activity” [3]. The training that accompanies professional development, according to E.F. Zeer, should be based on an activity basis. In the professional and personal development, the scientist distinguishes several stages. We are primarily interested in the third stage, which begins with admission to a university. This stage is aimed at obtaining a specific profession, characterized by a new social role of the student, new relationships in the team, greater social independence, political and civil maturity [4].

N.V. Kislinskaia, N.N. Nikitina and others consider the professional development of a university professor in terms of changes in personal characteristics. In their opinion, this directly influences the success of pedagogical activity and professional skills [5]. The process of personal development in the system of vocational education is characterized by psycho-physiological changes. The essence of professional development is that a person acquires the necessary qualities of personality, generalizes and systematizes professional skills and knowledge within a new situation of development, and successfully implements the functions of his social role. At the same time, the interests of a person penetrate deep into all spheres of his life, and professional motivation develops [6].

Personality shaping will be more effective when complying with the integrated approach in education. P.I. Pidkasisty, I.P. Podlasyi, V.A. Slashten and others have contributed to the development of the theory of the integrated approach.

An integrated approach in relation to education and training is considered as the principle of designing and organizing the functioning of pedagogical systems and processes. It consists of taking into account different sides and aspects of activities in the process of their design, as well as taking into account various external influencing factors. Education, training, scientific activity of university students is considered from the standpoint of an integrated approach and, fulfilling the mandatory requirements, influence students in three areas - consciousness, feelings and behavior. A positive result is achieved with the integral fusion of education (external pedagogical influence) and self-education of the individual. In this case, an integrated approach involves a systematic approach to the process of education and its management. Among the main factors of successful management are the current lifestyle of the student; mass media, the level of development and living conditions of the team, the norms of relationships, the individual and personal characteristics of the student. An integrated approach to the formation of an integral personality must include the set of all these conditions. Favorable for the individual and society, changes in the results of education are achieved not only due to direct impact on one or another sphere of the psyche of the emerging personality, but also when external conditions change that prevent the development of undesirable deviations from the norm and minimize negative influences. The structural elements of an integrated approach include: the unity of education, upbringing and development; unity of education and self-education; close interaction of social institutions of education (school, family, etc.); organizational support for an integrated approach [7; 8]. I.P. Podlasyi considers integrity as a unity of goals, objectives, content, methods and forms of educational influence and interaction. [9]. When implementing an integrated approach, university professors select the content, methods, forms and means of education. Analyzing the work programs of the academic courses of our university, we can state that for all taught courses, the implementation of the content is carried out according to the topics, provides for the use of educational technologies, methods and teaching aids, active and interactive forms of conducting classes, there are requirements for independent work, current and intermediate cer-

tification of students. Thus, the structural components of an integrated approach to teaching are the unity of purpose, objectives, content, methods and forms of teaching; unity of influence on consciousness, feelings and behavior; purposeful organization of all spheres of activity.

G.S. Kamerilova and a number of scientists in their scientific work note that the formation of the professional competence of a university graduate - the future elite of society, depends on the quality of the information and educational environment that has developed at the university, including knowledge bases, information resources, a developed system of information communications and information services, computer and software [10]. V.P. Beshpal'ko emphasizes that digitalization and computerization of education today are a necessary and obligatory condition for creating the intellectual base of the modern information society [11], which entails the organization and development of the information educational environment of the university. Today, the traditional education system is enriched with elements of a safe digital educational environment. The information and educational environment is aimed at developing various digital tools and services and creating conditions for their use in educational institutions, improving the skills of teachers in the field of digital technologies, artificial intelligence, which is reflected in the state program of the Russian Federation "Education Development" for 2018-2025 [12]. A. Iu. Uvarov includes an information section in the information and educational environment structure, which consists of information systems, services, tools used in solving certain problems [13]. In accordance with the characteristic features and requirements of the information and educational environment V.I. Toktarova and S.N. Fedorova, the following structural and content components are distinguished: content-methodical, software-technical, communicative, organizational and managerial [14]. The information and educational environment of the university includes the following sections: a personal account of a teacher, a personal account of a student, an electronic library resource, an electronic support system for training courses Moodle (Students Portfolio) [15].

When organizing the information and educational environment of the university, it is advisable to use technological solutions that are widely used in the practice of leading universities, which will allow you to quickly carry out the process of technological integration with a partner university (the most common e-learning platforms are Moodle); pay special attention to the informatization of the processes of organization

and implementation of the research work of undergraduates; ensure the possibility of integrating the information and educational environment of the university with a unified national system of authentication and authorization of employees and students, which would allow them to access the electronic resources of partner universities.

Clarifying the concept of “information educational environment” and “electronic information and educational environment”, we rely on the Federal Educational Standard, which specifies the requirements for the electronic information and educational environment of the organization. In Mari State University, the electronic information and educational environment is designed to ensure the information transparency of the university, information support and improve the efficiency of the educational process in accordance with the requirements of the Federal State Educational Standard for Higher Education (FSES HE) for the implementation of educational programs. Each university student during the entire period of study has individual unlimited access to the electronic information and educational environment (EIEE) of the university, the electronic library system. The single working space of the student is his personal account, where he can get access to all educational resources and services. EIEE of the Mari State University provides: access to education plans, work programs of academic courses (modules), practices, publications of electronic library systems and electronic educational resources specified in the work programs. Access is provided by accessing the platform <https://lks.marsu.ru>; fixing the course of the educational process (providing access to the schedule of classes, the schedule of tests and exams, the schedules for defending term papers, schedules of state certification tests and pre-exam consultations), the results of intermediate certification and the results of mastering the main educational program. The educational platform allows conducting all types of classes, procedures for assessing learning outcomes, the implementation of which is provided for using e-learning, distance learning technologies and the transition to the learning management system LMS Moodle <https://elearning.marsu.ru>, which has become the main focus of the launch of e-learning resource; the formation of an electronic portfolio of the student, including the preservation of the student's work, reviews and assessments of these works by any participants in the educational process. The student's electronic portfolio is a section of the student's electronic personal account, which serves to systematize and record the achievements of the student in educational, research, public,

social and other activities during the period of study at the university. At the same time, each student himself is responsible for the content of materials posted by him in the information environment of the university and open access [16].

The electronic information and educational environment created at the Mari State University implements educational computer programs that have not only a variety of content, but also a specific form of organization of educational material. Various forms of involving students in educational activities are used: analysis of text pages of lecture material, multimedia presentations, acquaintance with video clips, engaging in a business game as a participant, project implementation, practical and laboratory work, retained knowledge control when completing tests and quizzes. In accordance with the form of providing the material, the student is required to possess a variety of methods for mastering it.

By a unified electronic platform for managing educational programs at a university, we mean a set of information, educational, organizational, technological and managerial solutions that provide interactive interaction between participants in the educational process, aimed at the effective management of educational programs at a university.

The constituent elements of the university's EIEE are external electronic library systems (ELS) and an internal library system and an electronic catalog of the R.A. Panova scientific library of the Mari State University, an automated information system for managing an educational institution based on 1C: UNIVERSITY PROF, a corporate portal of the university, the official website of the university, a video conferencing system, a learning management system Moodle, other components necessary for organizing the educational process and interaction of the EIEE components [17].

The service system includes the following services: "Student's Personal Account" (lks.marsu.ru), LMS Moodle electronic learning resource (<https://elearning.marsu.ru>), "Teacher's Personal Account" (lkp.marsu.ru) and mobile application "My MarSU". A personal account is a personalized virtual workspace of a student, professor or university employee, which exists in closed access, in which services are provided according to the status and powers of the user.

Most of the services at the university have switched to consuming content from mobile devices, which allowed the university to give a new challenge to the university information infrastructure. Specialized mobile applications were prepared under the brand of the university and

for the needs of the main user – the student, since a well-developed application for Android or iOS is much more convenient than any optimized mobile site. Using the “My MarSU” mobile application, every student is informed about the schedule of classes, has the opportunity to monitor the results of intermediate certification and, in his spare time, select the classes of interest to him in the “Events” tab. The mobile application includes tabs such as an electronic grade book, a student ID card, and a curriculum. In particular, an electronic record book is a student’s document that records the results of intermediate attestations for the main professional educational program of higher education he is mastering. In the “curriculum” tab, the student has the opportunity to view the disciplines to be studied, certification forms, the number of hours allotted for lectures and seminars, independent work, practice and build student life for semesters and years of study. Similarly, the student can view this information more specifically in the student’s personal account by accessing the platform <https://lks.marsu.ru>. One of the innovations in MarSU for 1st year students is a digital student ID, which includes both an electronic student ID and a plastic student ID, which does not contradict the paper version. The electronic student card is stored in the mobile application “My MarSU”, published in the AppStore (for the iOS mobile operating system), Play Market (for the Android mobile operating system), AppGallery (for the Android mobile operating system) in the university’s electronic information and educational environment. Studies have shown that the My MarSU application is most actively used by full-time students. They are more interested in the sections of the mobile application. The results are presented in the form of a diagram (Fig. 1).

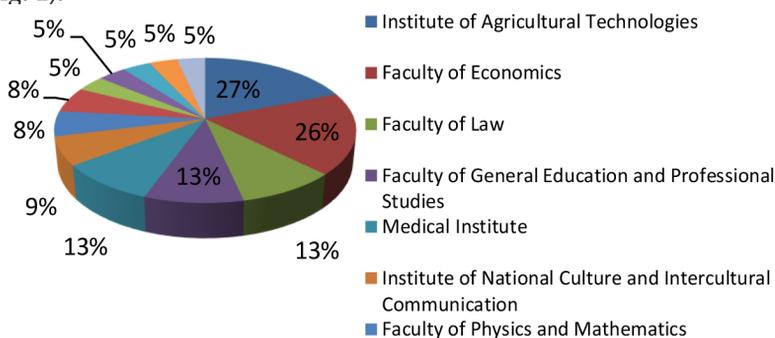


Fig.1 Use of “My MarSU” mobile application by students

When using information educational environment in a university to achieve an effective result, the following positive aspects can be noted: the use of information technology in the learning process; use of sources of textual, audiovisual and graphic information; enhancing the ability of presenting the results of educational activities to students; access to electronic educational materials for self-education; providing an opportunity for students to take part in various distance competitions, conferences and olympiads [18].

According to an integrated approach from the position of managing the pedagogical process, the problematic issue of the digitalization of education in the world has become the weak preparedness of the teachers themselves for the new format and the need for their training. For example, in Europe and South Asia, 50% of states are instructing university professors on how to interact remotely with students during a pandemic. At the same time, in sub-Saharan Africa, a third of the states have introduced distance learning, but none of them conducts trainings in this direction [19]. Most of the professors of MarSU, because of the timely development of the electronic information and educational service of the university, in accordance with the requirements of the Federal State Educational Standard of Higher Education, did not feel any particular difficulties with the onset of the pandemic. For MarSU professors, all information services and resources necessary for work were available through his personal account. The information system “Teacher’s Personal Account” (access to the lkip.marsu.ru service) is an element of the electronic information and educational environment of MarSU, includes such functional modules as the teacher’s profile (basic information about the professor, education, scientific sites); education plans, work programs, material support; electronic schedule of classes, attendance of students, attestation and progress of students; teacher rating. In general, the information environment of MarSU contributes to the professional development of professors by not only providing opportunities for the implementation of innovative pedagogical ideas, but also by taking refresher courses, including those using mobile devices.

Currently, the most common system of electronic learning resources is LMS Moodle (<https://elearning.marsu.ru>). It creates electronic learning resource with a certain structure that meets all the requirements: methodological support, lecture material, assignments for each topic, final testing in the course. The resource provides round-the-clock access to educational resources, the opportunity to provide feedback from the

professor; improvement of the content of education in accordance with the latest scientific achievements in the professional field. Undoubtedly, a positive feature of this resource is its structure and compliance with the requirements of educational standards (Fig. 2).

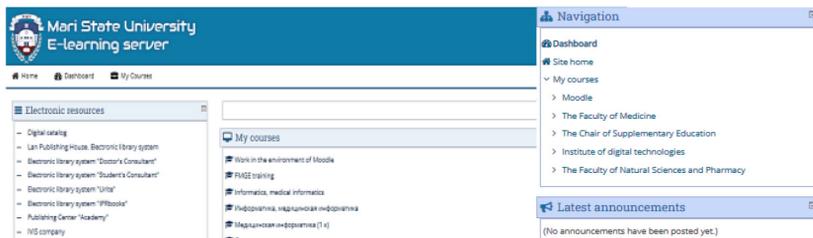


Fig.2. Structure of the e-learning resource of Mari State University in LMS Moodle

The need for information and methodological support for most students in the digital environment is emphasized by El'temerov A.A., Fedorova S.N. [20]. It is important that the resource allows you to set course parameters, create topics, upload the required elements and files. For each topic there are assignments and additional material. In the process of course editing, it is possible to add and remove various course elements, files, pages, tests, etc. Each student sees the electronic learning resource of the academic course on his page, and in each course all the sections mentioned above. This page to choose a course for a student looks like this (Fig. 3).



Fig.3. Page to choose a course for a student in LMS Moodle

Our university constantly enriches the EIEE. In 2021, Face ID has been implemented, which, when students and faculty members enter the academic building, recognizes a person's face using a volume-spatial form scanner. This system allowed to monitor the attendance of stu-

dents in the classes, this system is also interconnected with the electronic training schedule.

Based on the foregoing, we come to the conclusion that one of the main conditions for the professional and personal development of a student in the context of the development of the information and educational environment of the university is an integrated approach of pedagogical (educational, methodological), organizational, informational, technical conditions aimed at achieving the quality of the educational process, educational work and youth policy, improving the efficiency of research work of university students.

References

1. Bodalev AA. Vershina v razvitii cheloveka: kharakteristiki i usloviia dostizheniia [Apex in human development: characteristics and conditions for achievement]. Moscow; 1998. pp. 24-30.
2. Korytova GS., Cherkasova OA. Analiz podkhodov k issledovaniiu problemy pedagogicheskogo vzaimodeistviia prepodavatel'ia s uchashchimisia [Analysis of research approaches of the problem of pedagogical interaction between an university professor and students]. The bulletin of the Voronezh Institute of the Ministry of Internal Affairs of Russia. 2011;2:193-197.
3. Zimniia IA. Pedagogicheskaiia psikhologiia [Pedagogical psychology]. Moscow: Logos; 2005. 384 p.
4. Zeer EF. Psikhologiia professional'nogo razvitii [Psychology of professional development]. Moscow: Akademiia; 2007. 239 p.
5. Nikitina NN., Kislinskaia NV. Vvedenie v pedagogicheskuiu deiatel'nost': teoriia i praktika [Introduction to pedagogical activity: theory and practice]. Moscow: Akademiia; 2004. 224 p.
6. Sulima VN. Lichnostno-professional'noe razvitie studentov v period obucheniia v vysshem uchebnom zavedenii [Personal-professional development of students in the period of training at higher educational institution]. The bulletin of the Kostroma State University. 2017;5:74-79.
7. Pidkastyi PI. Kompleksnyi podkhod v obuchenii. Pedagogika [An integrated approach to learning. Pedagogy]. Moscow, Iurait; 2019. 408 p.
8. Slastenin VA, Isaev IF, Shiiyanov EN. Pedagogika [Pedagogy]. Moscow, Akademiia; 2002. 576 p.
9. Podlasyi IP. Pedagogika: 100 voprosov - 100 otvetov [Pedagogy: 100 questions - 100 answers]. Moscow: VLADOS-press; 2004. 365 p.
10. Kamerilova GS. Informatsionno-obrazovatel'naia sreda VUZa kak sredstvo realizatsii informatsionnogo podkhoda v obrazovanii [Information and educational environment of the university as a means of implementing the information approach in education]. The bulletin of the Minin University. 2015; 4:45-51. Available from: <https://vestnik.mininuniver.ru/jour/article/view/108>

11. Bepal'ko VP. Obrazovanie i obuchenie s uchastiem komp'yuterov (pedagogika tret'ego tysiacheletia) [Education and Learning with Computers (Pedagogy of the Third Millennium)]. Moscow: Izdatel'stvo moskovskogo psikhologo-sotsial'nogo instituta; Voronezh: MODEK; 2002. 352 p.
12. Decree of the Government of the Russian Federation of December 26, 2017 No. 1642 "On approval of the state program of the Russian Federation "Development of Education". GARANT - Legislation.
13. Uvarov AI. Orientiry obrazovatel'nykh reform i informatsionnye tekhnologii [Benchmarks for Educational Reform and Information Technology]. Education policy. 2012;1(57):99-111.
14. Toktarova VI., Fedorova SN. Informatsionno-obrazovatel'naia sreda vuza: interpretatsionnyi i sodержatel'nyi analiz [Information and educational environment of the university: interpretive and content analysis]. The bulletin of the Mari State University. 2018;12(4(32)):77-78.
15. Ivanova OI., Kutuzova ZI., Kutuzov AV. Informatsionno-obrazovatel'naia sreda vuza: sushchnost' i struktura [Information and educational environment of the university: essence and structure] [Internet]. Nauchno-metodicheskii elektronnyi zhurnal "Kontsept" = Scientific and methodological electronic journal "Concept". 2020;8:20-29. Available from: <https://cloud.mail.ru/attachments/16485024851923257195%3B0%3B2?folder-id=500015&x>
16. On approval of the Federal State Educational Standard of Higher Education - Bachelor's Degree in the Field of Study 44.3.02 Psychological and pedagogical education [Internet]. Available from: https://fgosvo.ru/uploadfiles/FGOS%20VO%203++/Bak/440302_B_3_20032018.pdf
17. Regulations on the electronic information and educational environment of the university [Internet]. Available from: https://marsu.ru/upload/iblock/a54/Pol_ob_elektron_inf_obrazov_srede_univer_25.11.2019.pdf
18. Lozhakova EA. Pedagogicheskie usloviia i printsipy obespecheniia effektivnosti protsessa formirovaniia informatsionnoi kompetentnosti studentov muzykal'nykh spetsial'nostei v khode obucheniia informatike [Pedagogical conditions and principles to ensure the effectiveness of the information competence building for music students in the learning of informatics]. The bulletin of RUDN University. Informatization of education. 2011;3:28-33.
19. Vegas E. School closures, government responses, and learning inequality around the world during COVID-19. Report 2020 [Internet]. Available from: <https://www.brookings.edu/research/school-closures-government-responses-and-learning-inequality-around-the-world-during-covid-19/>
20. El'temerov AA., Fedorova SN. Tsifrovye kompetentsii kursantov vuzov Ministerstva chrezvychainykh situatsii Rossii [Digital competencies of cadets of universities of the Ministry of Emergency Situations of Russia]. Nauchno-pedagogicheskoe obozrenie - Scientific and pedagogical review. 2021;3(37):64-71.



EDUCATIONAL CONSULTING IN THE SYSTEM OF DISTANCE LEARNING SUPPORT

Elena Kondratenko, Sergei Lavrentiev

Abstract. The paper theoretically substantiates the possibilities of educational consulting of distance learning. The study analyzed international experience in the use of remote digital consulting technologies. Based on the analysis, it is shown that for the successful development of innovative technologies in the digital economy, a wide interaction of various groups of participants in the educational process is necessary: students; teaching staff; employers; educational authorities and public organizations. The purpose of the study is to develop, test and implement methodological counseling for distance learning in educational institutions. The main idea of the project is the creation of the Center for Educational Consulting on the basis of the Mari State University. The activities of the Center will be aimed at the implementation of methodological, social, educational consulting of interested persons and target groups, assistance in identifying areas of competence and appropriate correction, including using digital educational technologies.

Keywords: methodological support and support, distance learning, distance learning technologies, professional competencies, consulting.

Introduction

Deep transformational processes in the socio-cultural, educational, scientific spheres, occurring under the influence of digital innovations, require a revision of approaches to solving emerging problems, the existence of which in the recent past was difficult to imagine. For community development, the digitalization of the educational space means increasing competitiveness in the labor market, reducing social tension, and ensuring a high quality of life. The introduction of technical innovations in all spheres of the economy has transformed the labor market, and as a result, has exacerbated the issues of employment of young professionals, the adaptation of graduates of secondary vocational and higher education.

The ongoing measures to adapt to the challenges of the new era are dictated by the requirements of employers represented by government agencies, public organizations, and the business community for the formation of digital competencies. A significant place in the implementation of a set of digitalization measures belongs to the consulting support for the competent specialists' professional training capable of working

in the information and communication environment. In modern socio-economic conditions, the main directions of digitalization occur in the context of interdisciplinary integration, methods of information consulting, the use of innovative, including remote action, electronic learning tools.

In this regard, the European Union experience, based on the model of digital competencies implementation in the field of education, is very useful. The implementation of the digital education development model relies on the further use of innovative teaching aids, the formation of key digital transformation skills, data collection, analysis and forecasting of education development trends. In the published report of a study conducted by the working group on education under the auspices of UNESCO: "Digital skills for life and work", the skills required by the digital society can be divided into: user and professional [12].

Scientific relevance

The project's subject choice is justified by the need to develop of general and additional education teachers' professional competencies, the most significant for the introduction and use of modern digital technologies and e-learning tools in education. Currently, distance learning technologies play an important role in ensuring the implementation of such requirements for modern education as the availability and high quality of education, the possibility of designing individual educational trajectories for different categories of students, and ensuring the formation of their competencies necessary for work efficiency in the digital educational space. The relevance of the project is determined by the possibility of solving these problems using the electronic information and educational environment of Mari State University as a platform for organizing the distance learning process for students, methodological and technological consulting for school teachers of Mari El Republic of and is confirmed by the successful experience of Mari State University teachers in organizing distance learning. Currently electronic courses are created for 100% of academic disciplines in LMS Moodle. In addition, LMS Moodle makes it possible to design, create and manage information and educational environment resources, easily integrates with other services and educational platforms, and allows organizing remote synchronous counseling for teachers who do not have deep knowledge in the field of programming and administration of databases, websites.

The purpose of the study is development, approbation and implementation of consulting support and support of distance learning in educational organizations.

Materials and research methods were theoretical analysis of literature on the research problem, modeling method, SWOT-analysis.

Discussion

During the period of forced lockdown, among students with disabilities who required psychological consulting support, a state of depression, anxiety, and fear was observed. Specialists of the “Committee of Mental Health and Social Support” link the causes of exacerbation of feelings of loneliness, stressful events, states of nervousness, excessive anxiety, as a result of rehabilitation from the consequences of a respiratory disease, and directly with the observance of self-isolation and social distancing measures [1].

The results of a study conducted in 2020 by the British public organization YoungMinds. More than 2,000 students under 25 with disabilities were interviewed. About 80% of students receiving regular psychological counseling answered in the affirmative to the question that self-isolation worsened their mental state. Among all respondents, 26% said they were unable to receive full consulting support due to canceled face-to-face events, and counseling by phone or online was too difficult for students. Self-isolation only increased feelings of anxiety, and the lack of stimulation methods was accompanied by a decrease in motivation to acquire knowledge in full. A small number of respondents (11%) who feel the need to be away from stressful situations associated with an unfavorable atmosphere in study groups, compliance with school instructions, and academic pressure noted an improvement in their mental health [3].

At the first stage of the project implementation (2021), based on the study of domestic and international experience, the conditions for consulting support and support for distance learning of educational organizations were identified, the regulatory framework for the project was created, and contracts were concluded with educational organizations of the Mari El Republic. An information and educational environment for the project was created by adapting the LMS Moodle of Mari State University to organize distance learning for schools and create personal electronic classrooms for students and teachers. To coordinate activities within the framework of the project, it is planned to organize on the basis of the Mari State University an Educational Consulting Center.

In order to develop teachers of general and additional education professional competencies, necessary for the introduction and use of modern digital technologies in education, as well as e-learning tools,

an additional educational program for advanced training of teachers “Methodological support of distance learning based on LMS Moodle” was developed and implemented. 54 teachers of educational institutions of Mari El Republic were trained under the program.

Respondents in the course of the survey named the main difficulties in creating their own course in LMS Moodle:

1. Lack of knowledge about LMS Moodle tools and the possibilities of their application in organizing distance learning and designing an electronic course - 25%.
2. Lack of methodological knowledge about the features of organizing distance learning - 4.2%.
3. Lack of time for designing an e-course - 70.8%.
4. Difficulty integrating with LMS Moodle other educational platforms that provide the possibility of distance learning organizing - 8.3%.
5. Difficulty in selecting educational content (course content) – 8.3%.
6. Difficulty in organizing interactive interaction with students - 16.7%.
7. Difficulty in organizing the control of learning outcomes - 8.3%.

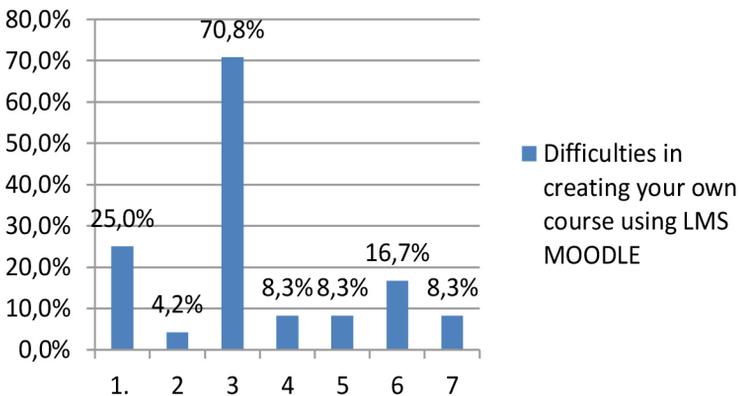


Fig. 1. Difficulties in creating your own course using LMS MOODLE

The experience of the first year of the site’s activity showed that the solution of these problems is impossible without improving the mechanisms of network interaction through the integration of resources of higher, additional and general education in order to improve the quality of distance education, as well as the development of a new type of Mari State University students - “digital volunteering” social activity, focused

on assistance to teachers and students in the organization of distance learning. All this is reflected in the model of organization of systematic methodological support and support of distance learning in organizations of general and additional education developed at the first stage of the project implementation.

As part of the first stage of the project, a program of additional professional education “Methodological support of distance learning based on LMS Moodle” was developed and implemented, focused on the development of professional competencies of teachers of educational institutions of general and additional education, necessary for the introduction and use of modern digital technologies and e-learning tools in education. 50 teachers from 12 educational institutions of the Republic of Mari El were trained under the program.

The result of training under the program was the development by teachers of more than fifty courses and modules in general education disciplines and additional educational programs. 100% of the educational program students developed their e-courses on this platform, 52.2% began to use them to organize distance learning in their professional activities. 26.1% of students presented their experience in creating electronic educational resources and organizing distance learning at scientific and practical events.

One of the prerequisites for effective project implementation management is receiving feedback from teachers on the degree of satisfaction with the organization and content of methodological support. Analysis of the results of a survey of teachers studying under the additional professional educational program for advanced training “Methodological support of distance learning based on LMS Moodle” allows us to state that 78.3% of respondents are completely satisfied with the content of the additional educational program “Methodological support of distance learning based on LMS Moodle”, 21.7% - generally satisfied. 82.6% of the respondents are completely satisfied with the interaction with the teachers of the program. The same number of respondents is completely satisfied with the opportunities provided by LMS Moodle for organizing distance learning (82.6%). As the main difficulties in creating electronic courses, 73.9% of respondents named lack of time, 26.1% - lack of knowledge about LMS Moodle tools and the possibilities of their application in organizing distance learning and designing an electronic course, 17.4% - difficulty in organization of interactive interaction with students in the process of distance learning.

The UN Expert Advisory Group on Science, Education and Culture has published the report *Digital Skills for Life and Work*, which contains a description of the user and professional skills required in a digital society. Mastering digital skills at the user level means:

- actions that allow you to freely handle electronic equipment to work in the global information network;
- carry out actions to set up a profile and create accounts; engage in targeted search and processing of information content.

Professional-level skills include such “hard skills” that are necessary when performing professional activities in a digital environment (hard skills). The achievement of a high professional level is facilitated by the so-called “soft skills”: critical thinking, the ability to implement creative projects, the ability to work in a team, etc. [12].

A team of “Digital Volunteers” was created in the Mari State University, uniting more than 30 students. For them, 3 seminars and master classes were organized to teach the basics of distance educational free-lance. The functions of digital volunteers include testing distance courses developed by teachers, providing prompt technological assistance to teachers and students when working with these courses.

Currently, teachers of educational organizations have developed 56 electronic courses for students of 15 educational organizations. It is assumed that the introduction of electronic courses will allow testing and implementing new mechanisms for different groups of students (children with disabilities, gifted children, students of rural schools, etc.) information and educational support in order to ensure the principle of accessibility of quality education by means of distance learning.

In addition, within the project framework, it will be possible to implement new mechanisms of network interaction through the integration of resources of higher, additional and general education in order to improve the quality of distance education. In 2021-2023, three project stages to be implemented.

Monitoring of the implementation of innovation activities is carried out at the end of each stage and includes the following types of research:

- professional expert assessment;
- reviews of trained teachers;
- presentation the work results to the pedagogical community;
- presentation of performance results through the university website;
- public and professional examination of the educational platform results [11].

Efficiency evaluation is carried out on the basis of the following criteria:

| <i>Criterion</i> | <i>Criterion name</i> | <i>Indicators</i> |
|------------------|---|---|
| Criterion 1 | Completeness of the developed regulatory and local legal documents on the project topic | <ul style="list-style-type: none"> - the availability of developed and tested methodological materials for the organization of distance learning and the development of electronic educational resources; - compliance of documents content with the requirements for them; - manufacturability of the developed legal documents (the possibility of their use in other educational institutions). |
| Criterion 2 | The level of development of methodological support | <ul style="list-style-type: none"> - availability of developed and tested methodological materials for the organization of distance learning and the development of electronic educational resource; - compliance of methodological materials content with the requirements of the modern level of the information educational environment development; - the presented materials demand, their availability to the pedagogical community. |
| Criterion 3 | The impact of resulting changes from innovation activity of teachers' professional competencies growth. | <ul style="list-style-type: none"> - raising the level of qualification of pedagogical workers in the field of organization of distance learning; - availability of methodological materials for the organization of distance learning and the development of electronic educational resource; - satisfaction of teachers with the training system; - the number of training events conducted; - the developed and tested program availability for teachers advanced training. |
| Criterion 4 | The project support information | <ul style="list-style-type: none"> - the availability of scientific publications and publications in the media of the site topic innovative activities; - reflecting the results of activities on the Mari State University website; - availability of analytical materials based on the results of monitoring studies that reveal the effectiveness (performance). |
| Criterion 5 | Practical significance of the project implementation | <ul style="list-style-type: none"> - fixing positive trends in the formation of professional competencies of teachers, ensuring the effective organization for various groups of students (including children with disabilities, gifted children, etc.) distance learning; - availability of conditions of specialists advanced training; - expansion of network interaction with educational institutions in the areas of the innovation platform. |

Expected project results

The city of Yoshkar-Ola and Mari El republic teachers of general educational organizations will have the opportunity to:

- necessary professional competencies development for schoolchildren distance learning organization;
- designing, creating and managing resources of an information and educational environment based on the Mari State University's LMS Moodle, which is easily integrated with other services and educational platforms;
- creation of a professional network community;
- exchange of experience on the problems of organization of distance learning;
- joint scientific and methodological publications;
- participation in the development, examination and implementation educational programs'.

Students of educational organizations will have the opportunity of high-quality affordable education in a convenient distance format in an environment alternative to school. Mari State University students involved in the digital volunteering movement will increase their competitiveness in the labor market by acquiring additional professional competencies in the field of digital technologies [10].

Based on the experience of designing and practical implementation of a student-centered educational trajectory, it is necessary to implement a number of consulting activities for the use of digital innovations in the university educational environment:

- train university employees to work with digital technologies (LMS Moodle, Microsoft Teams, Zoom, etc.) in educational activities;
- provide information and consulting support for the use of digital and cloud technologies;
- to motivate the active use of synchronous e-learning forms (online lectures, seminars, real-time consultations using instant messengers), asynchronous (off-line video lectures, electronic textbooks, E-mail consultations), as well as mixed methods (blended learning) e-learning of digital technologies in the university educational process;
- study the information support experience, distance learning of leading educational organizations using digital and cloud educational technologies.

These reasons served as an incentive to introduce innovative digital technologies into the practice of consulting activities of educational institutions, rehabilitation centers, and organizations providing psychological and social support. Designing an individually built educational route for people with disabilities requires a technology that is especially built according to the degree of complexity. The use of innovative digital technologies must be directed to solving the problems of youth education, which were unimaginable two years ago. Therefore, recent events have strengthened the importance of consulting the use of digital innovations in improving the quality of inclusive education. Inclusive practice is a form of integrative education. The difference between them lies in the fact that with integrative education, students with disabilities adapt to the existing and remaining unchanged in the education system [7].

With inclusive education, individuals with somatic, mental, socio-psychological, affective, linguistic and other characteristics are provided with special conditions for mastering academic disciplines. Such conditions can be created due to the adaptation of curriculum, new teaching methods development, changes in methods for assessing educational activities, etc.

Research findings and conclusions

Thus, the importance of digital educational consulting occupies one of the key positions in the formation of new socio-economic relations in various industries, from biotechnology and medicine to the media industry and IT security, having a transformative impact on the labor market. Without a permanent update of digital skills, a rethinking of the content component, it is impossible to imagine the success of modern society modernization. The role of educational consulting in the digital age is of particular importance and acts as an effective tool that has a stimulating effect of a specialist professional and creative activity.

The development and implementation of consulting support for distance learning of educational organizations will make it possible to implement new mechanisms for information and educational support for different groups of students (children with disabilities, gifted children, students of rural schools, etc.). In addition, to ensure the principle of accessibility of quality education by means of distance learning; will have a positive impact of educational institutions of general and additional education teachers' professional competencies development, necessary for the introduction and use of modern digital technologies in education, as well as e-learning tools.

References

1. Committee Guidelines on Mental Health and Psychosocial support. MH Innovation. Archived (PDF) from the original on 31 March 2020 [Internet]. Available from: <https://www.mhinnovation.net/sites/default/files/downloads>
2. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)". ArcGIS. Johns Hopkins University [Internet]. Available from: <https://gisanddata.maps.arcgis.com/apps/ops-dashboard/index.html#/bda7594740fd40299423467b48e9ecf6>
3. COVID-19 summer 2020 survey YoungMinds [Internet]. Available from: <https://youngminds.org.uk/about-us/reports/coronavirus-impact-on-young-people-with-mental-health-needs>
4. Education: From disruption to recovery. UNESCO [Internet]. Available from: <https://en.unesco.org/covid19/educationresponse>
5. Exploring STEM competences for the 21st century. 2019. 54 p. Available from: <https://unesdoc.unesco.org/ark:/48223/pf0000368485>.
6. Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China [published correction appears in Lancet. 2020 Jan 30.]. Lancet. 2020;395(10223):497-506. DOI: 10.1016/S0140-6736(20)30183-5.
7. Inter-Agency Standing Committee Guidelines on Mental Health and Psychosocial support. MH Innovation. Archived (PDF) from the original on 31 March 2020 [Internet]. Available from: <https://www.mhinnovation.net/sites/default/files/downloads>
8. Hallinen J. STEM education curriculum [Internet]. Available from: <https://www.britannica.com/topic/STEM-education>
9. Lavrentiev SY., Krylov DA., Kondratenko EV. Innovation processes in the vocational education system consulting development. Abstracts & Proceedings of ADVED 2021- 7th International Conference on Advances in Education, 18-19 October 2021. 2021. p. 187-191. ISBN: 978-605-06286-5-4. DOI: <https://doi.org/10.47696/adved.202130>
10. Lavrentiev SY., Krylov DA., Kondratenko EV. Innovative approaches to pedagogical counseling for university students in a pandemic. Abstracts & Proceedings of ADVED 2020- 6th International Conference on Advances in Education, 5-6 October 2020. 2020. p. 481-485. DOI: <https://doi.org/10.47696/adved.2020179>. ISBN: 978-605-06286-0-9
11. Lavrentiev SY., Krylov DA., Kondratenko EV. Methodology of social and pedagogical counseling in the context of lifelong education. Abstracts & Proceedings of ADVED 2021- 7th International Conference on Advances in Education, 18-19 October 2021, 18-19 October 2021. 2021. p. 192-195. DOI: <https://doi.org/10.47696/adved.202131>
12. UNESCO — “Working Group on Education: Digital skills for life and work”, 2017 [Internet]. Available from: <http://unesdoc.unesco.org/images/0025/002590/259013e.pdf>
13. UNICEF for every child. Inclusive education. Programme [Internet]. Available from: <https://www.unicef.org/education/inclusive-education>



RUSSIAN LINGUISTIC WORLDVIEW IN SOCIAL ADAPTATION OF FOREIGN STUDENTS

Elena Kartashova, Ekaterina Plotnikova

Abstract. The article deals with the concept of social adaptation as a complex phenomenon connected, firstly, with national cultural values acquisition and speech ethical norms of behavior of foreign students, and secondly, with intensive speech adaptation in Russian language environment. As the practice of teaching the subject “Russian Language and Speech Culture” in a Russian university shows, sociocultural adaptation process of foreign students becomes effective on the basis of anthropocentric methodology application that allows not only operating with the concepts “Russian linguistic worldview”, “Russian cultural consciousness”, “national concept”, but also applying certain methodological teaching methods in curricular and extracurricular activity. Within the representation of Russian linguistic worldview, different methodologies of dealing with Russian phraseology play an important role in academic activity. Such phraseological units are able to explicate significant fragments of Russian ethnic cultural consciousness that would be understood by foreign students. Besides, the excursion method, the role play method and other technologies in different communicative situations directed to the Russian speech culture acquisition and ethical standards of behavior are essential in extracurricular work with foreign students. Thus, the article represents the acute synergetic approach, allowing to consider sociocultural and speech adaptation process of foreign students based on their acquisition of universal mechanisms of Russian linguistic worldview within curricular and extracurricular activity.

Keywords: internationalization of education, sociocultural adaptation, speech adaptation, cross-cultural competence, Russian linguistic worldview, synergetic approach.

Relevance and scientific novelty of this research is provided by the following factors: 1) studying the process of social adaptation as a complex sociocultural phenomenon interconnected with national cultural values of Russian mentality and with intensive speech adaptation of foreign students in a natural language environment; 2) applying the anthropocentric methodology that allows representing the significant fragments of Russian linguistic worldview, available for acquisition by foreign students in curricular and extracurricular activity; 3) using the synergetic approach for acquisition of Russian linguistic worldview fragments in the process of sociocultural and speech adaptation.

The goal of the research consists in studying the sociocultural adaptation process of foreign students based on the application of anthropocentric methodology, which allows to use adequate methodological techniques in curricular and extracurricular activity for acquisition of national cultural values and ethical standards of behaviour in Russian language environment.

The object of the research is the process of social adaptation of foreign students in a structural and informative interconnection with a personality-oriented approach in pedagogics and also with the theory of ethno-cultural and sociocultural adaptation.

The subject of the research is Russian linguistic worldview based on anthropocentric methodology, that is topical in modern linguistic science and that allows detecting acute fragments of Russian linguistic worldview contributing to sociocultural and speech adaptation of foreign students.

Currently, the significant processes are taking place in the field of education in Russia, one of which is the process of internationalization of education: an increasing number of foreign students choose to receive higher education at universities of the Russian Federation. Thus, the Mari State University currently has more than 2,000 foreign students from the near and far abroad countries. Their success in education directly depends on the formation of cross-cultural competence based on the ability of foreign students to reach mutual understanding with representatives of various ethnic groups and cultures, primarily with the Russian ethnic group and the Russian culture. In this regard, the process of social adaptation plays a significant role.

The concept of social adaptation in the humanities is considered from different aspects: sociological, psychological, professional, cultural-ideological, linguoculturological. All these aspects are interrelated and interdependent, that is, the concept of social adaptation is a complicated, multicomponent, complex phenomenon [1]. Besides, the differences between social, physiological, psychological, socio-cultural and other types of adaptation in real life and pedagogical activity are meaningful aspects of a single process [2].

There is no explicit definition of the term “social adaptation” in pedagogics, there is no unified scientific concept of the process of social adaptation. At the same time, modern scientific psychological, pedagogical and methodological sources include this term in active scientific vocabulary, generalizing and systematizing the substantive components of

this concept: “social adaptation is the adaptation of an individual to the conditions of a new social environment, the convergence of goals and value orientations of the group and the individual being part of it, the assimilation of norms, traditions, culture, entry into the role structure of the group, the ability to organize leisure and recreation, an adequate system of relations with other people, especially when teaching foreign languages, which is manifested in speech behavior, speech etiquette, and non-verbal forms of behavior” [3, 286]. Thus, two provisions are relevant for this study: 1) the communicative nature of the adaptation process, which is implemented in educational and extracurricular activities; 2) the conditionality of the process of social adaptation of foreign students by national cultural values, standards and rules of speech ethics.

It is important to emphasize that for foreign students from distant foreign countries, successful sociocultural adaptation is primarily based on successful speech adaptation [3, 250], which is provided by intensive speech practice in the natural Russian language environment, knowledge of ethnic cultural speech behavioral stereotypes and ethical behaviors.

Implementation of the successful sociocultural adaptation of foreign students in the Russian natural language environment largely depends on the chosen scientific and methodological paradigm, which, firstly, dictates a certain way of research, and secondly, the use of adequate teaching methods in educational and extracurricular activities. Such scientific paradigm can be the anthropocentric or cognitive methodology which produces the idea of the Russian linguistic worldview as a reflection of the explanation process for facts, concepts, contexts of Russian culture which includes updating and improving background knowledge through the interpretation of various cultural facts [4, 130]. The idea of linguistic worldview is used in many humanities. In linguoculturology “linguistic worldview” is the reproduction of the objects and phenomena in the world around us by means of language” [5, 134]. Russian linguistic worldview at the level of national concepts reflects Russian ethno-lingual consciousness which can be noted at different language levels: lexical, phraseological, grammatical.

Within the process of the foreign students’ sociocultural adaptation two subjects are introduced into educational and training activities of the Mari State University. They are “Russian Language and Speech Culture” and “Medical Communication in the Russian Language” (only for students of the Medical institute).

In the academic work with foreign students within the subject “Russian Language and Speech Culture” the study of the ethnic cultural originality of Russian linguistic worldview is possible at different levels of the language system. However, phraseology is the most productive language level for revealing ethnic cultural knowledge about the history, traditions, customs, and everyday life of Russian people. The process of learning Russian idiomatic expressions requires focused and thoughtful work because phraseological units are complicated word complexes in terms of their structure and meaning. We can say that foreigners have acquired communication and cultural competences only if they meet the challenge of mutual understanding in natural language communication in accordance with language norms, ethics and the country’s cultural traditions; if they use a variety of language means, including phraseological ones. Among teachers of the Russian language there is no general consensus at what stage the study of Russian phraseology should start: 1) at an advanced stage when students already have a sufficient vocabulary and have a good mastery of Russian grammar in general; 2) in the first year thereby in the relatively short term they can learn the minimum of key phraseological units which are included in active vocabulary and reflect national cultural values of Russian mindset. Let us consider the principles, methods and some examples of thematic tasks used by teachers at different stages of teaching Russian phraseology to foreign students. The main principle for all stages of teaching is a careful selection of introduced phraseological units: they should be frequent and actively used in speech of native Russian speakers, contain national and cultural component, and be joined together in thematic groups of words. For instance, the thematic groups may be the following: “Clothes” (bluestocking, wear out the seat of one’s trousers, with no warmth to it (Rus: with fish fur)); “Family” (the splitting image of one’s father/mother, to be old enough to be someone’s mother/father, stray away from one’s home, old wives’ tales (Rus: grandmother’s tales)), “Health” (red as a rose (Rus: blood with milk), as strong as an ox, pass the buck (Rus: from a sick head to a healthy one)), “Labour” (jack-of-all-trades (Rus: be good at one’s hands), gifted hands (Rus: golden hands), the hard way (Rus: by one’s own sweat and blood), not stir a finger), “Food” (make a mess (Rus: cook porridge), roll out the red carpet (Rus: welcome with bread and salt), you can’t spoil a good thing (Rus: too much butter won’t spoil the porridge)), “Appearance” (picture perfect (Rus: as a picture), as like as two peas (Rus: as like as two water drops), skin and bones). When

explaining the meaning of phraseological units, it is very important to draw students' attention to such category features as reproducibility, consistency of meaning, impossibility of word-by-word translation neither into the intermediary language nor into the native language of students. Thus, the use of transformation i.e. the replacement of phraseological units with synonyms, can help students at advanced stage of learning to identify these categories (e.g.: *promise jam tomorrow* (Rus: *give breakfasts*) – promise, *within a stone's-throw* (Rus: *two steps away*) – close or nearby, *sew up one's mouth* (Rus: *have a mouth full of water*) – be silent, *be niddle noddle* (Rus: *pick with one's nose*) – be sleepy, *talk a blue streak* (Rus: *wag one's tongue*) – to chat, *well before dawn* (Rus: *no light no dawn*) – early). At the initial stage students may use an effective principle of clarity: to learn phraseological units with the help of special pictures where they are represented. The experience of such method is given, for example, in M.I. Dubrovin's series of bilingual dictionaries "Russian and English Idioms in Pictures") [6].

Sociocultural adaptation of foreign students as a complex and multi-component process includes not only intensive speech adaptation within the class activity, but also extensive extracurricular work aimed at developing national cultural values by mastering ethical norms, standards of communication and by using the role play method implying such situations as: "dean-student", "teacher-student", "student-student", "shop-assistant-customer", "doctor-patient". During practical classes of "Russian Language and Speech Culture", students learn "cultural cliches" frequently used in speech by native Russian speakers. In order to make this kind of work more relevant teachers of the Russian language use resource books specifically developed for foreign students that contain information about standard etiquette formulas used in Russian speech culture [7].

The methods of training games [8] implemented in the educational process are aimed at foreign students' active development of soft skills and include, for example, the methods of role play games and adaptation which help to master certain linguistic material by repeating it multiple times. For the same purpose, teachers actively use various methods of working with the Russian text: role-playing, creating an adaptation of Russian fairy tales, expressive reading of poetry by Russian classics. Thus, foreign students take part in various cultural events together with their instructional coaches. For instance: during the Helicon literary club meeting dedicated to the 200th anniversary of the birth of

I.S. Turgenev held at the National Art Gallery, students performed an adaptation of the prose poem “Threshold” (see Fig. 1), triggering positive emotions in the audience and enriching their vocabulary and communication skills [17-18]. During the part of celebration of I.A. Krylov anniversary three fables were staged for the audience by foreign students from India [19]. As practice shows, the methods of role play and adaptation, various working methods with Russian texts help not only in mastering the new language material, but also promote to formation of a sense of belonging to the Russian culture and literary classics. As a result, foreign students’ self-esteem and motivation increase, so the process of sociocultural adaptation in terms of natural language environment is implemented in practice.



Fig. 1

The participation of foreign students in grant projects and various competitions and festivals makes showpiece events of language skills acquisition and sociocultural adaptation. Thus, foreign students from India took part in the student grant project “The Red Book of the Russian Language”. Under the guidance of instructional coaches they studied explanatory dictionaries, read, translated, memorized and recited the meaning of a rare Russian word, recorded a video and uploaded it

to YouTube [9; 10; 11; 12; 13] and the social networks Vk.com [14] and Facebook.com [15].

At the IX Festival of National Cultures “In This Big World”, held in Linguistics University of Nizhny Novgorod, students from India studying at the Medical Institute of the Mari State University took the 2nd place and it can be regarded as a illustrative result of successful socio-cultural adaptation. The students made a report on “Love and Beauty in the National Culture of India” in the Russian language [16]. The experience of public speaking helped students to overcome the so-called “language barrier”, present the culture of their own country and answer the audience’s questions in Russian. Foreign students from the near and far abroad countries participate in the annual festival of national cultures “Lingua Territory” which takes place at the Institute of National Culture and Intercultural Communication of the Mari State University.

The usage of such teaching technologies as conducting skills competition and quests helps to accelerate the process of sociocultural and speech adaptation. For example, teachers of the Russian language developed and conducted a linguistic quest based on the Russian folk tale “Kolobok (Little Round Bun)”. The participants were first-year medical students from India [17]. The game consisted of two stages: the first was familiarizing and the second was practice-oriented. At first, students were invited to watch a cartoon story “Kolobok in a New Way” in Russian with teacher’s comments. As they were watching, students learned about the content of the fairy tale, which became the thematic basis of the quest, and then completed a listening task. Then, all participants were divided into five teams, which had to do five tasks, testing various language skills: lexical, phraseological, grammatical. The final sixth task – “Meeting with the Fox” – was to demonstrate the communicative abilities of the participants: to build a “spontaneous” dialogue, using the skills of verbal and nonverbal Russian culture of communication. For completing the tasks, teams received not only points, but also letters, from which in the end they were to collect a code word – “gingerbread”, a kind of gratitude from Kolobok for his rescue. A correctly composed word gave the right to purchase the main “artifact” of the quest – Kolobok saved from the Fox. The linguistic quest based on the Russian folk tale “Kolobok”, according to the organizers and participants, turned out to be a bright, dynamic, intellectual event that contributes the unity and unification of representatives of different national cultures. Thus, the technology of linguistic quest can be considered an effective education-

al technology when working with foreign students who are motivated, firstly, by the form of active speech activity, and secondly, by the desire to show knowledge of Russian fairy tale culture in an effort to solve the learning tasks as quickly as possible.

The model of the regional Olympiad “Remember Your Name”, developed by philology teachers [22], introduces foreign students to the history of the culture of the Russian people and its traditions. The illustrations, which cover the traditional culture of Russia quite extensively, help to give a proper reference point and provide an understanding of the folk way of life, cultural traditions of the Russian people (see Fig.2).



Fig. 2

As emphasized above, the implementation of the ethical component of the Russian linguistic worldview, which contributes to the sociocultural adaptation of foreign students, is one of the key factors in classes on the Russian language and speech culture. The consolidation of ethical behavioral standards also occurs in extracurricular activities and includes active acquaintance of students with the Russian cultural scene through the excursion method, that is, an educational excursion

organized by a teacher. As practice shows, an excursion is one of the most effective means of keeping students motivated to learn the Russian language and forming sociocultural competence [23, 167].

For over five years, the Mari State University has been intensively organizing excursions to museums and showrooms of Yoshkar-Ola by the efforts of instructional coaches and the Chair of Russian Language, Literature and Journalism teachers. Thus, the annual event “The Night of Museums” has become a traditional meeting point for foreign students, who came to study in the Mari El Republic, with new acquaintances - residents of our city. It is particularly remarkable that Indian students of the Medical Institute are constantly not only immediate participants of this event, but also participants natively performing national dances and songs with a great relish (see Fig. 3).



Fig. 3

The educational excursion method, which consist of three obligatory stages – pre-excursion, main and final – is the basis of the annually implemented project “Cultural Scene of the Mari Region”. At the pre-excursion stage, Russian language teachers get students insight into special topical vocabulary and texts that prepare the perception of cultural objects on the forthcoming excursion. The second stage is conducting the excursion. It is associated with the development of listening skills, understanding the monological speech of the guide. The third stage is the final one. From the methodological point of view it is the main one, as exactly this stage harnesses skills of speech adaptation of foreign students in the Russian cultural scene.

The implementation of the project “Cultural Scene of the Mari Region” allows foreign students not only to gain unique knowledge about the original art world of the Mari El Republic as part of the Russian Federation, but also provides an opportunity to get acquainted with the picturesque corners of the Mari region’s nature and its suburbs with architectural monuments, historical events and traditions. Russian language teachers annually organize off-site excursions to the castle of Count Sheremetev, located in the Yurino village alongshore the Volga River. Students get acquainted with the architecture, culture of the Russian manor of the nobility of the XIX century, the history of the castle construction, the complex process of restoration of the state-rooms, the castle art gallery. During the excursion, students always ask some questions, take a lot of pictures (see Fig. 4).



Fig. 4

In the Mari El Republic the city of Kozmodemyansk is considered as the historical and cultural ethnographic center, where the museum complex “Ethnographic Museum in the Open Air” is placed. Wooden architecture, Russian domestic implements, crafts, crockery, weaving, children’s toys are so original and interesting for foreign students that they forget about the “language barrier” and ask a bunch of things to guides and teachers. As a result, this creative dialogue is understood as a real process of speech adaptation in the natural Russian cultural scene (see Fig. 5).



Fig. 5

Excursion outside the Mari El Republic – to the Republic of Tatarstan and its capital Kazan – are of great interest to the foreign students of the Mari State University. Students are getting acquainted with another ethnic culture of the Russian Federation – the Tatar – and its architectural sights, the history of Kazan, as well as making sure to visit the Kazan Kremlin and the Kul Sharif Mosque (see Fig. 6).

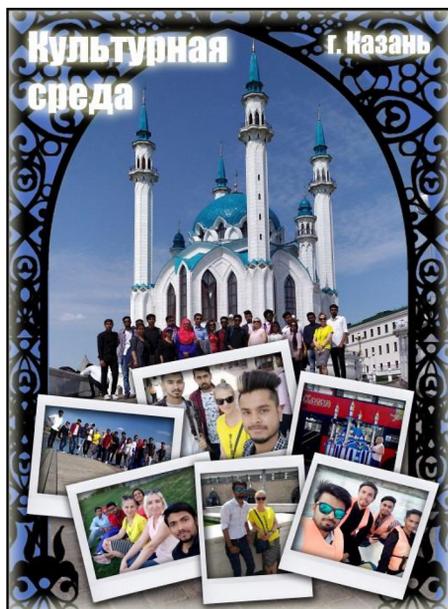


Fig. 6

After the excursions students are preparing the photo collages which are traditionally showcased in the university classrooms.

Thus, the excursions as a part of the excursion method are aimed at developing verbal communication skills as an essential part of socio-cultural competence. The excursion method allows expanding not only the vocabulary but also cultural awareness, develops students erudition and creative skills, motivates them to study the Russian language and Russian culture and to get acquainted with other ethnic cultures of the Russian Federation [24].

During the pandemic, the professors of the Chair of Russian Language, Literature and Journalism of the Mari State University efficiently used Skype to work with small groups of foreign students and Zoom for lectures and extracurricular activities. During presentations and dialogues students were engaged in an active communication process.

Sociocultural adaptation of foreign students during curricular and extracurricular activities of a Russian university can be successful and productive if: 1) it is based on synergetic approach, that allows implementing the interaction between the process of intensive verbal adap-

tion in the natural Russian language environment and the appliance of anthropocentric methodology, which is rapidly developing in contemporary linguistics and linguoculturology; 2) it utilizes the anthropocentric methodology that uses such terms as “Russian linguistic worldview”, “Russian national consciousness”, “national cultural concept” which dictate the appliance of valid methods, methodologies and technologies in implementing the process of learning the Russian language as a method of students sociocultural adaption; 3) it studies Russian phraseology as a valuable national-cultural part of the Russian linguistic worldview within the course of “Russian Language and Speech Culture”; 4) it implements a combination of methods, methodologies and technologies in its curricular and extracurricular activities: method of role play and staging, different listening and text reading methodologies, olympiads and educational texts technologies, as well as an excursion method.

The system of curricular and extracurricular work with students based on this synergetic approach makes it possible to represent the process of the foreign students’ sociocultural and speech adaptation through learning the universal mechanisms of the Russian linguistic worldview and Russian national consciousness.

References

1. Shpak LL. Socio-cultural adaptation: the essence, direction, mechanisms of implementation: the dissertation of the Doctor of Social Sciences. Kemerovo; 1992. 398 p.
2. Witenberg EV. Socio-psychological factors of adaptation to social and cultural changes. St. Petersburg; 1995. 76 p.
3. Azimov EG., Shchukin AN. A new dictionary of methodological terms and concepts (theory and practice of language teaching). Moscow; 2009. 448 p.
4. Lunkoval NN. Worlds and spaces of a literary text: monograph. Moscow; 2020. 160 p.
5. Alefirenko NF. Linguoculturology. Value-semantic space of language. Moscow; 2013. 288 p.
6. Dubrovin MI. Russian and English phraseological units in pictures. Moscow; 2009. 315 p.
7. Plotnikova EA , Bobykina EN , Smirnova AY, comp. Russian Language and Speech Standards: Practical Work. Yoshkar-Ola: Mari State University; 2019. 125 p.
8. Plotnikova EA, Bagautdinova GG, Pirogova NM. Game Content in Youth Education Programs. In: 32nd IBIMA Conference, 15-16 November 2018, Seville, Spain. 2018. pp. 7837-7843.
9. Dvuzhilny. Red Book of the Russian language [website]. Available from: <https://www.youtube.com/watch?v=imG-KTwOd8Y>

10. To twist. Red Book of the Russian language [website]. Available from: <https://www.youtube.com/watch?v=iw3sqEjMvuE>
11. Fierce. Red Book of the Russian language [website]. Available from: <https://www.youtube.com/watch?v=WE8pfLDHB6E>
12. Otrada. Red Book of the Russian language [website]. Available from: <https://www.youtube.com/watch?v=CQG4VUFtPp4>
13. Nugget. Red Book of the Russian language [website]. Available from: <https://www.youtube.com/watch?v=xkDwILO7ZS8>
14. Students of MarGU from India - participants of the project “Red Book of the Russian language”. Lens: Youth student television IFF MarGU [website]. Available from: https://vk.com/wall-108589731_358?fbclid=IwAR3hEi-phyG-d1bC54kVfgzHJePRGBGrThcwqYmuqyi0E9QNNx_T_3jkFo3o
15. Red Book of the Russian Language (@rusredbook) [website]. Available from: https://www.facebook.com/rusredbook/?__tn__=%2Cd%2CP-R&eid=ARDnZfNUAIIDsbYJ-b9JysbAhd9BZTFjkIRVeNr-GmV_Up_SOFvAWOEUeISeV_mLzyFXFRveofPDHiGHO
16. Plotnikova EA, Zolotova TA, Efimova NI, Pirogova MN. Practice of teaching Russian in a multicultural environment (from work experience). In: Murzin ZhV, editor. Education: theory, methodology, practice: monograph. Cheboksary; 2019. pp. 9-37.
17. Plotnikova EA, Pirogova NM, Bobykina EN, Smirnova AYu. Gaming as a Way of the Young Students Activation: On the Issue of the Beginner Foreign Students’ Russian Study Organization. In: 34th IBIMA Conference: 13-14 November 2019, Madrid, Spain. 2019. pp. 4332-4337.
18. Plotnikova EA, Bobykina EN, Smirnova AYu. Gaming Technologies as an Effective Means of Learning Language at the Early Stage of Studying Russian as a Foreign Language. Norwegian Journal of development of the International Science. 2018;21(3):29-30.
19. The literary club “Helikon” dedicated a meeting to honoring I. A. Krylov. Mari State University [website]. Available from: <https://marsu.ru/~UYPv5>
20. Foreign students of Mari State University are prize-winners of the IX International Festival of National Cultures “In this Big World”. Mari State University [website]. Available from: <http://marsu.ru/~0lQZp>
21. Bobykina EN, Akhmedzyanov AR, Smirnova AY. The specifics of the linguistic quest when working with foreign students. In: Globalization and the linguistic picture of the world: collection of materials of the International Scientific and Practical Conference: at 2 p.m. II. (Ferghana (Uzbekistan), May 2019). Ferghana; 2019. pp. 48-50.
22. Zolotova TA, Efimova NI, Plotnikova EA, Pirogova MN. Volga ethnolinguistic Olympiad “Remember your name” [website]. Available from: <https://marsu.ru/events/folk/>
23. Kojaspirova GM, Kojaspirov AYu. Pedagogical dictionary: for students. higher. and sred. ped. studies. Moscow; 2000. 176 p.
24. Nefedov IV, Khashkhan MA. Excursion as a way of forming linguocultural competence in teaching RCT. Young scientist. 2015;20(100):602-606.



MOBILE PEDAGOGY: ANALYSIS, REQUIREMENTS AND EXPERIENCE OF IMPLEMENTATION

Vera Toktarova, Dina Semenova, Anna Shpak

Abstract. Today, the implementation of mobile learning is a separate area of development and application of digital technologies in higher education institutions. In this connection, the issue of substantiating the theory and practice of mobile pedagogy becomes relevant. The article deals with issues related to the disclosure and justification of the possibilities of digital pedagogy for the effective construction of the educational process of a modern university. The research included the use of theoretical, empirical and mathematical methods. The article substantiates the relevance of introducing mobile pedagogy technologies in the educational and pedagogical process of the university. The authors give the definitions of mobile pedagogy, carry out their analysis from the technological, technical, methodological and didactic sides. The article considers the main interrelated components of the mobile learning system (student component, educational component, communicative component, and technical component). It describes the results of the comparative characteristics of traditional and mobile pedagogy. The article substantiates the main content and organisational requirements for introducing strategies, forms and methods of mobile pedagogy into the educational process of the university. It presents the results of an experimental study on the readiness of teachers to use mobile pedagogy technologies in their professional activities.

Keywords: mobile pedagogy, digitalization of education, mobile learning, mobile devices, educational process, student, university

Introduction

The daily use of mobile phones and gadgets by young people, which can also be used for educational purposes, is currently the main incentive for the mass distribution of mobile learning around the world.

Mobile technologies are transforming the balance between the learning process and student participation. That is why mobile learning is a form of learning different from distance or mixed ones, characterizing a new round of development of digitalization of human society.

The relevance of the development of mobile learning is due to many factors: the rapid pace of development of the market economy [1; 2; 3; 4], formation of new needs of society in relation to modern education technologies [5; 6; 7], improvement of forms and methods of teaching and learning [8; 9]. The development of mobile multimedia applications,

mobile Internet, broadcast mobile communication directly contributes to mobile learning.

In the aspect of studying the phenomenon of “mobile learning”, it is necessary to refer to the research of V.A. Kukleva [5]. The scholar notes that mobile learning includes a system consisting of the following provisions: teachers of mobile learning will not be able to teach the student what they themselves do not know; mobile learning is a job that requires conscious efforts from students; only someone who owns information can manage mobile learning.

According to M. Bransford and J. Douglas [10], the uniqueness of mobile learning is expressed primarily in the absence of linkage to a specific location and time, the training material is always at hand, which allows students to carry out a continuous educational process at any convenient time. In this context, mobile learning brings us closer to significant changes in the orientation, values, behavior and mentality of the younger generation.

In her study, A. Kukulska-Hulme [11] justifiably emphasises that mobile learning eliminates the need to create special computer classes and gives teachers complete freedom to provide students with online applications. Mobile learning is often simple in content, and is more often used to provide students with access to audio materials, to exchange text messages, to participate in surveys, text chats, and to keep and view notes.

Mobile learning completely changes the educational process, as mobile devices modify not only the forms of material presentation and access to it, but also contribute to the creation of new forms of cognition and mentality. Learning becomes just-in-time, just enough, and just-for-me [12]. This type of training is characterised by multimedia, structuring, accessibility, modularity, and interactivity. Mobile technologies transform the balance between the learning process and student participation, providing the following fundamental advantages:

- quick access to authentic learning and reference resources and programs anytime, anywhere;
- expanding the scope of the educational process beyond the walls of the educational institution and the student campus, portable devices can be used anywhere, at any time, including at home, on the train, on the bus, etc.;
- constant feedback from the teacher and the learning community; organisation of group activities based on cloud services, collaborative

- work with documents, –project managers;
- use of mobile phones, gadgets, gaming devices, etc., attracting young people who may have lost interest in education;
- taking into account the individual characteristics of a student – diagnosis of problems, individual learning rate, etc.;
- personalisation of training, diagnostics and accounting of individual characteristics of students, creation of personal educational space;
- expanding opportunities and ensuring equal access to education for all students, taking into account the diversity of special educational needs and individual opportunities, including people with disabilities;
- development of skills and abilities for lifelong learning [13].

In this regard, it is important to note the features of such learning: differentiation into separate parts, sequence of stages of activity and thought processes, systematic control, independence, repeatability when not mastering the material, consultation, tutoring, etc.

Scholars, depending on their goals, in their research focus on various aspects of the development of mobile learning: theoretical, historical and methodological foundations of mobile learning (Y. Mehdipour, H. Zerehkafi [14], S. Wexler [2], Yu.V. Isaeva, V.A. Kuklev [5], S.L. Lobacheva, A.M. Merkulov [9], D.V. Pogulyaev [4], V.I. Soldatkina, E.S. Tikhomirova, etc.); possibilities and principles of using portable personal devices in teaching (J. Kossen [3], E.D. Patarakin, S.V. Titova [13], etc.); experience in the development and application of mobile learning tools (D. Attevel, S. Wexler [2], S.V. Kuvshinov, J. Traxler [12], S.V. Titova [13], A.A. Fedoseev and others); prospects and opportunities for mobile learning (A. Kay, A.M. Merkulov [9], J. Traxler [12], M. Sharples, etc.).

Today, the need to use mobile learning approaches as a component of the digital strategy of a higher education institution is due to the following prerequisites:

- high level and dynamics of the spread of mobile devices in the student and teaching environment, and the steady interest in their use, already formed by external social and psychological factors;
- significant cognitive potential of the audience of a higher educational institution, flexibly and adequately responding to changes in the established practice of organising the educational process, and easily adapting to the use of new approaches and technologies;
- educational materials are relatively easy to turn into media content and content for interactive mobile services;

- mobile services and content, both technologically and methodologically, are quite simply integrated into the infrastructure of the electronic educational environment of the university.

In connection with these prerequisites, the question of the theory and practice of mobile pedagogy becomes relevant.

The key idea of mobile pedagogy is to overcome the contradiction between the needs of modern youth in organising the educational process using non-traditional means and forms of education at any time, regardless of location, using portable gadgets, and on the other hand, the traditional education system at the university, which is not ready to provide these innovations.

Thus, the *purpose* of the article is to reveal and substantiate the possibilities of digital pedagogy for the effective construction of the educational process of a modern university.

Research Results

At the moment, there are several interpretations and definitions of the concept of mobile pedagogy in the foreign pedagogical literature, based on various features of mobile devices, on didactic opportunities provided by mobile technologies.

Mobile pedagogy is:

- a special branch of pedagogy, the science of education, training and upbringing, which has a target setting for the formation of the ability for lifelong learning in the process of mobile learning and education [15];
- using mobile technologies for teaching and learning [16];
- effective methods of teaching and learning using mobile technologies [17];
- a special branch of pedagogy that reveals the patterns of personality development in the process of mobile learning and education throughout life, regardless of the place and time, based on remote technologies, using mobile and portable devices, implemented in the conditions of creating new forms of cognition and mentality, characterised by multimedia, structuring, accessibility, modularity and interactivity [18].

From a technological point of view, mobile pedagogy is based on the transfer and receipt of educational information using various technologies to any portable mobile device with which you can access the Internet, get or find materials, instantly take a survey or test, etc.

From a technical point of view, it is based on the use of convenient portable mobile devices and gadgets to optimise and expand the teaching and learning processes.

From a methodological and didactic point of view, much attention is paid to improving the efficiency, quality and optimisation of learning processes; expanding the organization, means and methods of teaching and learning.

Considering the aspects of the definition of mobile pedagogy, it can be noted that the main interrelated components for its functioning are the following [19]:

- *student component* includes individual abilities and characteristics of a student, educational goals, preferences and needs, level of knowledge and skills, motivation, emotional intelligence, learning style characteristics, etc.;
- *educational component* is characterised by the use of various pedagogical techniques and technologies, the development of the course structure, strategies and training scenarios, the organisation of access to the mobile learning system, the choice of educational material depending on the style preferences of students, etc.;
- *communicative component* contains tools and services for communication of learning subjects, providing feedback, taking into account cultural and age differences of learning subjects, establishing and maintaining rules for interactive communication within the electronic environment;
- *technical component* includes the physical, hardware and software characteristics of mobile devices and the network (screen diagonal, device size and weight, processor power and speed, battery capacity, the ability to input/output information, the capacity of ROM and RAM, compatibility with other devices, extensibility of system software, etc.) for optimal provision of educational process and cognitive interaction of learning subjects.

However, the implementation of these components has not yet been sufficiently developed and introduced in universities. Teachers should not only master the means of processing audiovisual content of didactic texts, but also learn how to use and timely offer network information and tool resources to the students, form databases, use means of information searching, storing and systematising. Most teachers and students today should learn how to use remote access resources and tools.

With the use of mobile technologies, pedagogy should adapt to the conditions of the modern environment, becoming more directed and interactive. Mobile pedagogy focuses its attention on the assimilation of information in small chunks, on the most accurate correspondence with the situation and on the attractive aspect of the process of interaction with the educational product.

Considering the possibilities of mobile pedagogy, it is necessary to note a number of shortcomings that are neutralised by the competent distribution of activities. For example, the difficulty in concentrating on acquiring the information due to a sufficiently large number of notifications from other applications installed on a mobile device, or educational applications have to compete with games and entertainment applications for the attention of the student. This problem can be solved by using game techniques, interactive training / practices.

Moreover, mobile technologies are limited by the small screen of the device and unreliability of the Internet connection or low download speed are also factors that can add difficulties to the student, but UI/UX developers are working on these shortcomings.

Mobile pedagogy, unlike traditional pedagogy, aims to develop the ability for continuous learning throughout life at any time and in any place. The main idea of traditional pedagogy is repetition (“Do as I Do”) and the integral characteristic is based on memory, while mobile pedagogy focuses its attention on cognition and comprehension (“Learn and Comprehend”) and on free and creative self-expression [18]. The authoritarian style of interaction, monologue and close nature of traditional pedagogy turns into flexibility, accessibility, and dialogue nature in mobile pedagogy . Teachers’ functionality is also expanded, they are now not just carriers of information and keepers of norms and traditions, but virtual consultants, mobile tutors. The training of students provides an opportunity to build the mental activity of each student in accordance with their individual characteristics and specified requirements, which is achieved by a clear correlation of the purpose and stages of activity, methods and means, the content of training and educational technologies (Table 1).

| Name of Indicator | Traditional Pedagogy | Mobile Pedagogy |
|--|---|---|
| Goal | Training of a specialist with fundamental knowledge and competencies in their major/ field of training | Training of a specialist with fundamental knowledge and competencies in their major / field of training, capable of lifelong learning in any place and at any time |
| Learning conditions | The educational process is focused on creating the same conditions for all students | The student is a subject of cognition, independently determines the individual trajectory of learning |
| Nature of training | The learning process consists in the internalisation of normative activities | Identification of one's own learning style based on the diagnosis of the student's personal qualities |
| Determining the scope of knowledge | The same amount of knowledge is established for all students and the appropriate educational material is selected | The amount of knowledge calculated for each student is established, taking into account their abilities, motives, opportunities, interests, etc. |
| Building a trajectory for studying educational material | The teacher consistently sets the topics of passing the training material | The sequence of topics is formed in accordance with the cognitive characteristics and preferences of the student |
| Role of a teacher (educator) | There is an authoritarianism of the teacher (educator), the teacher as a guardian of norms and traditions, a carrier of information | Teaching is considered as a process of development (self-development) of the student, taking into account their abilities. The teacher acts mostly as a tutor (assistant), consultant |
| Nature of the interaction of participants in the pedagogical process | A student as an object of teaching. The activity of the teacher is aimed at regulating the student's activities | The student is an active subject of the educational process, connected with the teacher by joint activities |
| Forms of organisation | Focus on collective and front-line work | Orientation to individual work, independent search and independent discoveries; remote, virtual, mobile, network forms |
| Teaching methods | Reproductive methods of teaching. The work boils down to "training" students to solve problems of one kind, another kind, etc. | Identification of the student's learning style and, based on it, determination of the learning strategy, selection of appropriate teaching methods |
| Control | Strict teacher control system | Application of various forms of control and self-control, including continuous pedagogical monitoring |

Tab. 1 Comparative characteristics of traditional and mobile pedagogy

The use of mobile technologies in education requires organisational efforts on the part of education managers, research and methodological work of scholars and teachers to introduce strategies, forms and methods of mobile pedagogy into the educational process. For the effective implementation of the principles of mobile pedagogy, it is necessary to comply with the following content and organizational requirements:

- selection of pedagogical technologies (reasonable application of technologies depending on the type of activity of students, educational goals and planned results; widespread introduction of situational learning; management of the learning process; orientation to active independent work; providing feedback, etc.);
- provision of software and technical infrastructure (creation of free Internet access space at the university, availability of a large number of mobile services in the electronic education environment for organising and supporting the educational process, activities, etc.);
- choice of ways to use mobile devices (using BYOD (Bring Your Own Device) and/or CYOD (Choose Your Own Device) technology);
- creation of special resources for the implementation of mobile learning (educational activity support services; organisation and support services for the educational process; research and project activities; feedback services; application store and educational content; general information mobile services; mobile identification and authentication services; mass notification services; intelligent navigation services, etc.) [20];
- purposeful preparation of the scientific and pedagogical staff for the use of mobile learning (creation of mobile educational content; design and structuring of the learning process; implementation of feedback; analysis of the digital footprint of students, group and individual learning dynamics and correction, if necessary, etc.);
- solving regulatory and legal issues related to ensuring information security in a mobile electronic educational environment.

Discussion

Today, the problems of introducing mobile devices into the activities of educational organisations are being actively discussed, the issues of developing and applying interactive systems for evaluating educational achievements of students are being actively addressed. Learning using mobile devices becomes especially relevant in the context of the introduction of Federal State Educational Standards and the expansion of forms of independent work of students [20]. In this regard, the authors

conducted a study on the readiness of teachers to use mobile pedagogy technologies in their professional activities.

The purpose of the study is to determine how ready teachers are and how they relate to the introduction and use of mobile pedagogy in their professional activities. A questionnaire developed for conducting the research includes questions of various subject content.

The analysis of the survey data has shown that the question “What, in your opinion, primarily influenced the introduction of mobile pedagogy technologies in modern education?” the majority of the respondents (54.8%) answered that it is the active implementation of online learning (Fig. 1). Undoubtedly, the educational process in the situation of the spread of Covid-19 coronavirus infection has undergone significant changes and the active introduction of online technologies has become the flagship of this process. At the same time, 36.3% of the respondents believe that the impetus for the development of mobile learning was the development of wireless technologies (Wi-Fi, 3G, 4G). It is also obvious that the increase in the amount of information transmitted from teacher to student requires the use of new technologies in the educational process, which was noted by 6.5% of the respondents. According to 2.4% of the respondents, the change in the methods of perception of educational information by modern students led to the active introduction of mobile pedagogy.

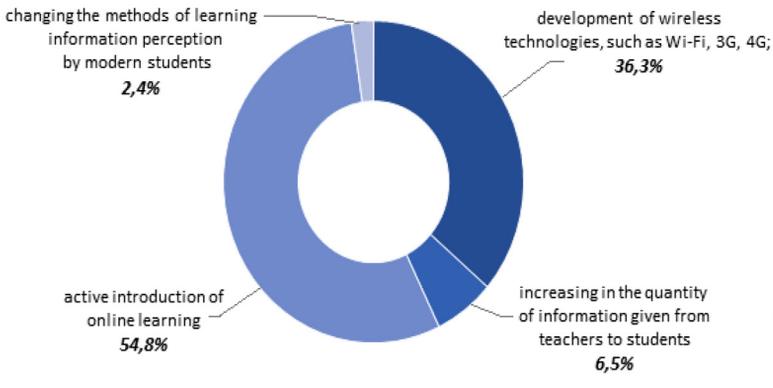


Fig. 1 The results of the respondents' answers to the question “What, in your opinion, primarily influenced the introduction of mobile pedagogy technologies into modern education?”

Analysing the block of answers to the questions about the use of mobile technologies in various aspects of teacher's activity, it should be noted that teachers most often use mobile technologies to plan their professional activities (49.3% of the respondents do this on a regular basis, 41.9% sometimes use them). Besides, 62.1% of the respondents note that they sometimes use mobile technologies to prepare and conduct training sessions. The vast majority of the respondents (72.1%) do not use mobile technologies at all to test students' knowledge.

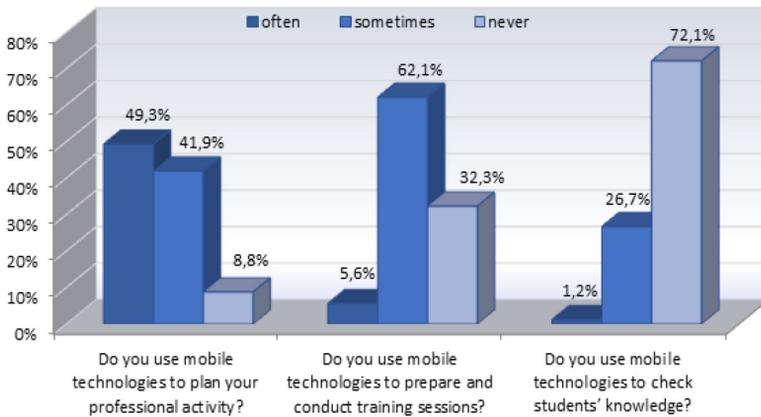


Fig. 2 The results of the respondents' answers to the block of the questions about the use of mobile technologies in various aspects of teacher's activity

In our opinion, this is primarily due to the fact that most teachers are not familiar with the possibilities of mobile technologies in these areas of activity. In addition, many feel fear, remembering the difficult process of introducing computer technologies into the educational process. In part, our assumption was confirmed by the answers of the teachers to the question "Do you experience difficulties when using mobile pedagogy technologies?". This question was related to multiple choice questions. 83.4% of the respondents answered that they lack methodological assistance and technical knowledge. 49.1% answered that they lack methodological assistance. Only 1.2% of the respondents do not experience difficulties when using mobile pedagogy technologies. It should also be noted that 59.4% of the respondents firmly believe that the use of mobile pedagogy tools makes it possible to increase the effectiveness of classes, makes them more informative and interesting for students. The

answer “rather yes” to the same question was given by 31.6% of the respondents. “Probably not” was answered by 7.9%, the answer “no” was given by 1.1% of the respondents.

The analysis of the block of answers to the question “How often do you use the tools of mobile pedagogy within the framework of the subject taught?” highlighted the leaders – these are e-mail, messengers and social networks, which are constantly used by 75.29%, 90.29%, and 73.29% of the respondents, respectively (Fig. 3).

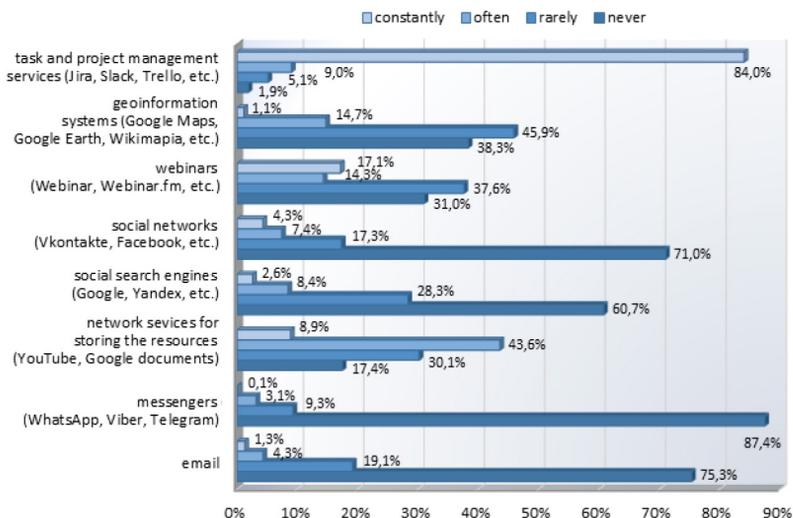


Fig. 3. The results of the respondents’ answers to the question “How often do you use the tools of mobile pedagogy within the framework of the subject taught?”

As can be seen from Figure 3, teachers also use search engines on an ongoing basis in the educational process, which is expected, since the Internet information resource is the most used service when searching for information. It is also expected that messengers, e-mail and social networks are actively used, which allow organising the process of information exchange and communication within the framework of the subject being taught. The teachers were mostly unfamiliar with the capabilities of task and project management services. In our opinion, this is due, among other things, to the fact that project management and project activities are not actively used by teachers in the educational process.

The results of the survey has shown that services such as e-mail, wikis, messengers, social networks and search engines have firmly established themselves as tools of mobile pedagogy used for the organisation and implementation of the educational process.

The results of the study showed that teachers understand the importance of using mobile pedagogy technologies in the educational process, but do not actively use their potential. This is partly due to the fact that mobile pedagogy technologies are used by teachers as an additional tool in organising the learning process, and not as the main one, which is associated with additional workload. But nevertheless, teachers are ready to develop in this direction, improve their knowledge and skills in the field of implementation of mobile pedagogy technologies for further use in their professional activities.

Conclusion

It is becoming obvious that mobile devices will become an everyday part of learning in the near future, which will only help the teacher and students interact with each other. With the help of personal mobile devices, the efficiency of access to information is significantly increasing, and their functionality sometimes exceeds the capabilities of stationary computers due to built-in photo and video cameras, microphone, tilt sensor, geolocation tools and others.

One of the important means of increasing the effectiveness of the pedagogical process in the higher education system is the use of mobile pedagogy technologies. This is a systematic process, in addition to making a decision on the need to use mobile pedagogy technologies in their professional activities, it is necessary to remember about a reasonable way of using them, depending on the type of activity of students, providing the appropriate resource and software and technical infrastructure, as well as the regulatory framework for their use.

References

1. Aresta M, Pedro L. Mobile learning and higher education: a theoretical overview. *Journal of Mobile Multimedia*. 2015;5:147-156.
2. Wexler S, Schlenker B, Brown J, Metcalf D, Quinn C, Thor E, Van Barneveld A, Wagner E. 360 research report mobile learning: What it is, why it matters, and how to incorporate it into your learning strategy. Santa Rosa CA: eLearning Guild; 2007. 239 p.
3. Kossen JS. When e-learning becomes m-learning. *Palmpower Magazine* [Internet]. 2001 [cited 2022 Apr 5]; Available from: <http://www.palmpowerenterprise.com/issues/issue200106/elearning001.html>

4. Pogulaev DV. [Vozmozhnosti primeneniya mobil'nyh tekhnologij v uchebno-m processe]. Applied Computer Science. 2006;5:80–84.
5. Kuklev VA. [Stanovlenie sistemy mobil'nogo obucheniya v otkrytom distantsionnom obrazovanii]. Ul'yanovsk; 2010. 46 p.
6. Bhardwaj RK, Jain RK. Research trends in mobile learning: a global perspective. Collnet Journal of Scientometrics and Information Management. 2015;7:205-224.
7. Brown TH, Mbatii LS. Mobile learning: moving past the myths and embracing the opportunities. The International Review of Research in Open and Distributed Learning. 2015;3:115-135.
8. Toktatova VI, Blagova AD. [Primenenie mobil'nyh tekhnologij v usloviyah kontekstnogo obucheniya]. Distance and virtual learning. 2015;9(99):58–65. Russian.
9. Merkulov AM. [Obuchenie pri pomoshchi mobil'nyh ustrojstv – novaya paradigma elektronnoogo obucheniya]. Young scientist. 2012;3:70–75.
10. Bransford M, Douglas J. How People Learn: Brain, mind, experience, and school. Washington: D.C. 2000;5:12–18.
11. Kukulska-Hulme A. Mobile learning: Analytical note [Internet]. 2010 [cited 2022 Apr 5]; Available from: <http://iite.unesco.org/pics/publications/ru/files/3214679.pdf>
12. Traxler JB. Current State of Mobile Learning [Internet]. 2010 [cited 2022 Apr 5]; Available from: http://www.academia.edu/180449/Current_State_of_Mobile_Learning
13. Titova SV. [Mobil'noe obuchenie segodnya: strategii i perspektivy]. Bulletin of the Moscow University. 2012;1:9–23.
14. Mehdipour Y, Zerehkafi H. Mobile Learning for Education: Benefits and Challenges. International Journal of Computational Engineering Research. 2013;03:91–103.
15. Nagovicin RS., Miroshnicenko AA., Senator SYu. [Realizaciya mobil'noj pedagogiki v nepreryvnom obrazovanii uchitelej fizicheskoy kul'tury]. Integration of education. 2018;22(1):107–119.
16. Cooke L, Schugar J, Schugar H, Penny C, Bruning H. Can Everyone Code? : Preparing Teachers to Teach Computer Languages as a Literacy [Internet]. 2020 [cited 2022 Apr 5]; Available from: <https://www.igi-global.com/chapter/can-everyone-code/237420>
17. Singh L, Thomas TD, Gaffar K, Renville D. Mobile Learning among Students and Lecturers in the Developing World: Perceptions Using the UTAUT Model [Internet]. 2016 [cited 2022 Apr 5]; Available from: <https://www.igi-global.com/chapter/mobile-learning-among-students-and-lecturers-in-the-developing-world/159384>
18. Nogovicin RS. [Formirovanie fizicheskoy kul'tury studentov v obrazovatel'nom prostranstve gumanitarnogo vuza]. Moscow; 2014. 444 p.
19. Toktarova V, Blagova A, Filatova A, Kuzmin N. Design and Implementation

- of Mobile Learning Tools and Resources in the Modern Educational Environment of University. *Review of European Studies*. 2015;7(8):318-324.
20. Toktarova V, Fedorova S, Semenova D. Network and Mobile Technologies in the Educational Process of the HEI. *Proceedings of the 6th International Conference on Education and Social Sciences (INTCESS 2019)*. 2019. p. 432-436.



THE USAGE OF DIGITAL RESOURCES AND TECHNOLOGIES IN THE PROFESSIONAL DEVELOPMENT OF HIGH SCHOOL GRADUATES

Aksar Eltemerov, Daria Ivanova

Abstract. The article discusses digital resources and technologies in the professional development of high school students. The authors cite data on the history of digitalization in Russian education. The urgency of the problem under study is noted. The article lists the negative and positive aspects of the digitalization of education. Statistical data of the conducted diagnostics are given. The authors of the article highlight the risks of implementation of the digital technologies in higher education and ways to overcome them. The usage experience of digital resources and technologies in education is disclosed. The digital competencies of a high school graduate are defined. The conclusion is made about the effectiveness of digital technologies in the education of today's students.

Keywords: digital technologies, educational environment, robotics, scientific and technological progress, modernization, professional training, high school, digitalization of education.

The technological progress in our contemporary society is so intense that the very concept of “digital technology” is constantly evolving. At the end of the 20th century, digitalization had a slightly different characteristic and was perceived as something happening “nearby”.

At the end of the 20th century elements of digitalization in the educational environment could only be afforded by the heads of large educational organizations, often in the form of printed texts or other statistical data. The possibility of quick material editing had increased the work efficiency. Further, there were the technical and finance faculties the first to adopt computer technology as a part of academic subjects.

Today digitalization is our everyday life and the transformation of education. The essence of the definition has not changed in general, but the spatial scale of the term's perception has changed significantly. Digitalization has opened up virtual space and the Internet. Cellular technology has changed our communicative characteristics [5].

Modern requirements related to the new functions and tasks facing the education system, rapid changes in the forms and methods of learning, the demands of society and the achievements of scientific and technological progress dictate the need for changes and significant adjust-

ments in the organization of the educational process. In this regard, the system of professional training of higher education, must actively and creatively respond to the demands of the time [4].

Currently, an urban dweller spends about 40 % of his/her time in direct interaction with digital technologies per week and this number is constantly growing. New professions and new areas of interaction are emerging.

Digitalization of education, like any modernization, has both positive and negative aspects.

The positive side includes huge opportunities for the implementation of the educational program, high productivity and a huge potential for the creative realization of the teacher and student. Nowadays, the teacher, for example, thanks to digital technologies, has the opportunity to create an “ideal lesson” on a particular topic of the discipline, quickly improving it in the process of pedagogical activity. A distinctive feature of a virtual network is the possibility of constant interaction, regardless of their geographical location [1].

Distance education is currently very popular. Numerous educational platforms, group and individual conferences, blogs, chats, allow for constant interaction between a teacher and a student, a graduate student and a supervisor, etc. The positive aspects also include the ability to visualize the material being studied, namely drawings, tables, diagrams, diagrams, photographs, video materials. A unique advance in the field of visualization is the discovery of 3D modeling. New discoveries increase the efficiency of all spheres of human activity, due to the increase in processing speed and the possibility of prompt editing of the studied material.

Traditional jobs under the influence of digitalization acquire new functions. However, at the same time, the risk of a complete change in some professions or even their complete disappearance increases. In mechanical engineering, for example, the full automation of the production process has made some manufacturing professions unnecessary. In its turn, the full automation of the pedagogical process will lead to the fact that the profession of a teacher of theoretical disciplines will become irrelevant. And, perhaps, in the future there will be professions that serve an autonomous system of transferring knowledge and skills.

As a result of the survey of more than 150 high school students, it was revealed that all respondents would eagerly attend a lesson with a robot teacher. The root cause of such statistics is natural human curiosi-

ty. At the same time, only 15% agreed to take a full artificial intelligence course. Only 30% of the respondents attached importance to the quality of the lesson organization. It should be noted that the robots themselves, at present, are not able to create an “ideal lesson” and, in the near future, an additional function of teachers will be the development of algorithms for possible scenarios of introductory classes within educational programs. Already today, there are robot teachers that effectively implement the transfer of theoretical knowledge about the environment in primary grades [2].

In an era of highly developed digital culture, there are still risks of software failures of digital platforms. And, unfortunately, along with the progress of the virtual space, there is an evolution of digital virus programs that destroy the stable operation of autonomous systems from the inside. Users’ personal data is of a particular value. In addition to the formation of cultural branches of the digitalization of public life, there is a need for new developments in the field of digital security. This therefore involves huge resources for digital antivirus developments, which contribute to the emergence of new professions [5].

One of the most significant problems of modernization of education at the present time is its irregularity. High technical achievements are concentrated in some points of society and completely absent in others. As an example, we can compare the educational institutions of the capital cities of Russia and of small settlements in the same regions. Educational standards and programs are the same for the entire state, but the possibilities for its implementation differ significantly. A simple inspection of the technical equipment shows the uneven distribution of resources, and this significantly reduces the effectiveness of the digital modernization of education.

The methodologies that are successfully used in capital cities, using the latest digital solutions, cannot be implemented in most schools in small settlements because of the lack of the necessary technical equipment. As a rule, the available computer equipment does not meet the required technical specifications or is the personal property of teachers who donate personal funds to meet the established requirements.

Currently, a huge number of virtual platforms, fulfilling the state program, implement additional education and advanced training courses for representatives of various professions. Such courses are aimed at helping to enrich required knowledge and develop additional practical skills.

The disadvantage of such courses is that they are offered for self-development “on-the-job” which leads to the formality of this stage of self-development.

After analyzing the speed of digitization in the educational process over the past five years, it was revealed that during the training the relevance of professions varies. Thus, entering high schools with some popular specialties, students can complete the full course of study and receive a diploma of a completely irrelevant profession. The situation is even more critical for specialized school and college majors [4].

Today, high school graduates are faced with increasing demands on their knowledge and skills. This is traditional knowledge in the specialty, supplemented by digital solutions of modern technical progress. Graduates are required to have digital competencies in all areas of their specialty, from communication to creativity skills. It is necessary to highlight the necessary digital competencies of modern high school graduates:

1. The confident usage of computer and office equipment.
2. Skills in working with interactive whiteboards and other audiovisual media.
3. The confident usage of standard computer programs and applications, video editors and audio converters (e.g. OfficeSuite programs).
4. Being proficient in the use of social media messengers and knowledge of how to work safely in a digital environment (5).
5. The knowledge of state websites regulating the main provisions and requirements for the standards of the chosen profession, as well as websites of organizations of the future profession of the graduate (EIOS).
6. Knowledge of platforms and applications necessary for the implementation of distance learning (Urite, Zoom, Prometheus, LECTA, InfoUrok, InternetUrok, Foxford, Yandex.Textbook, Uchi.ru, YaClass, Desmos, Learning Apps) [7].
7. Skills to apply special programs requiring in-depth study in the profession (e.g. profession-oriented innovative schools) [8].
8. Skills to operate specialized technical tools and robotics with the latest software (e.g. in medical schools - Magnetic Resonance Imaging (MRI) scanner) [5, 7].

All these constantly expanding competencies require continuous self-development from graduates. Mastering various kinds of competencies is the final cause of the learning process, determined in modern society by the demands of employers [10].

The digital competence of the teachers themselves is important. Studies show that students' perception of the material presented in the digital educational environment largely depends on the teacher: his personal qualities and skills in using digital technologies [11]. The digital competence of teachers determines the success of a chosen learning path based on digital resources [12].

In addition to knowledge, skills and abilities a modern graduate student must have a personal computer that can handle the latest software innovations in the future profession. This applies to a greater extent to technical universities and to a lesser extent to humanitarian ones. However, the provision of the most modern computers or gadgets, along with an honors diploma, for example, is not provided by any decree or university. Perhaps this will be included in the education program in the near future, as the employers will be comfortable with competent and "staffed" employee and the State order will provide for the full theoretical, practical training and material and technical equipment of the graduates for further employment and fulfillment of important state tasks in their professional activities.

References

1. Sergeev VA, Antipov MA. Features of the use of digital resources and technologies in the educational process of the seminary. Lord's Niva. Bulletin of the Penza Theological Seminary. 2021;2(20):97-104.
2. Certificate of state registration of the database No. 2015620590 Russian Federation. Scenarios of robot behavior in preschool educational institutions (version 2.0) (DB Robot and preschooler 2.0): No. 2014621895: Appl. 12.24.2014: publ. 04/07/2015. In Bocharova NB; applicant State budgetary educational institution of higher education of the city of Moscow "Moscow City Pedagogical University".
3. Arkhipov MV, Vartanov MV, Mishchenko RS. Industrial robots: control of manipulative robots: Textbook. 2nd ed. Moscow: Yurayt Publishing House; 2020. 170 p. ISBN 978-5-534-13082-9.
4. Gorshkova AP. Robot nurse or robot nurse. In: Ethos: natural and artificial human improvement: materials of the IV International scientific and practical conference, Tver, April 03–04, 2019. Tver: Tver State Technical University; 2019. p. 379-382.
5. Eltemerov AA, Eltemerova OV. Culture of behavior in modern digital space. Culture and security. 2021;2:39-43. DOI: 10.25257/KB.2021.2.39-43.
6. Barashkov AA. Field bug algorithm in the problem of local motion planning for mobile robots. Journal of Advanced Research in Technical Science. 2020;19:51-58. DOI 10.26160/2474-5901-2020-19-51-58.

7. Eltemerov AA. Digitalization of the educational environment in universities EMERCOM of Russia Priority directions of psychological and pedagogical activity in the modern educational environment: collection of materials of the All-Russian scientific and practical conference. Yoshkar-Ola; 2021. pp. 86-90.
8. Fedorova S, Ivanova D, Balysheva K. Digital technologies in civic and patriotic education of students. Issue 3S Web Conf. Volume 273, 2021 XIV International Scientific and Practical Conference "State and Prospects for the Development of Agribusiness - INTERAGROMASH 2021" Article Number 12054 Number of page(s) 6 Section Environmental Education and Training of Ecologists DOI <https://doi.org/10.1051/e3sconf/202127312054> Published online 22 June 2021 E3S Web of Conferences 273, 12054 (2021)
9. Eltemerov AA, Fedorova SN. Digital technologies in professional training of specialists of the EMERCOM of Russia. Vestnik of the Mari State University. 2020;14(2):168-174. DOI: 10.30914/2072-6783-2020-14-2-168-174
10. Fedorova SN, Vorontsova EM. Formirovanie informatsionno-kommunikativnoi kompetentnosti budushchikh bakalavrov i magistrrov [Formation of information and communication competence of future bachelors and masters]. Yoshkar-Ola, Mari State University Publ. house; 2018. 233 p.
11. Frolova EV, Rogach OV, Ryabova TM. Preimuchshetva i riski perekhoda na distantsionnoye obucheniye v usloviyakh pandemii [Benefits and risks of switching to distance learning in a pandemic]. Perspektivy nauki i obrazovaniya = Perspectives of science and education. 2020;6 (48):78-88. DOI: 10.32744/pse.2020.6.7/
12. Zhigalova OP. Formirovaniye obrazovatel'noy sredy v usloviyakh tsifrovoy transformatsii obshchestva [Formation of the educational environment in the conditions of digital transformation of society]. Uchenye zapiski Zabaykal'skogo gosudarstvennogo universiteta [Scientific notes of the trans-baikal state university]. 2019;14(2):69-74. DOI:10.21209/2658-7114-2019-14-2-69-74



SOCIO-PSYCHOLOGICAL PORTRAIT OF PRESCHOOLERS IN THE DIGITAL AGE

Olga Petuchova, Svetlana Grunina

Abstract. In this article, the authors draw attention to the changes that occur with the process of personality formation of today's preschoolers in the digital age. The aspects of digital socialization are considered based on how they are presented in modern studies of scientific educators and psychologists. The issues of changing the role of an adult in shaping the personality of a preschooler in a digital environment are discussed. The article also presents the results of a comparative analysis of apersonality development of a today'spreschooler and a preschooler in the "pre-digital era". The contribution analyzes the results of a survey of teachers of preschool educational institutions with at least 15 years of experience in educational institutions, who assessed the formation of personality development indicators of children living at different times. The assessment was carried out according to the development indicators of such spheres of personality as social and communicative, speech, cognitive, artistic, aesthetic and physical growth. The authors give their view in substantiating changes in the level of development of a child according to these indicators, analyze the causes of changes in the personal development of a preschooler, based on opinions of teachers expressed in response to the specific questionnaire.

Keywords: digitalization, digital technologies, digital socialization, childhood transformation, social development of the personality of a preschooler.

The global changes taking place in the modern world in the context of the total digitalization of the human environment have affected the stage of preschool childhood. In recent decades, the phenomenon of childhood in terms of the socialization of a preschooler has experienced a significant transformation, and digital technologies have accelerated this process.

As noted by the outstanding psychologists of our time L.S. Vygotsky, I.S. Kon, D.B. Elkonin, the socialization of a child consists in his acquisition of the experience of entering the system of social relationships and connections, using them in the future in his activities [1; 2]. A.N. Leontiev argued that preschool childhood is significant for the process of socialization; during this period the actual "humanization" of the child occurs, when speech, sign thinking, specific forms of behavior appear and the child is capable of accessible types of productive activities [3]. Socialization is also understood as the separation of a child from an

adult, familiarization not only with family, but also with global human culture, therefore, it can be considered as one of the most important characteristics of preschool childhood.

To explain what is happening with the phenomenon of childhood in modern society, we will try to start with N. Postman's idea that there is currently no clear boundary between childhood and adulthood. K.N. Polivanova also supports this idea, noting that the difference between ethnic or social groups can be much more significant than between a modern child and an adult. One of the reasons for this can be considered that modern children are able to receive information, master new ways of activity and cultural practices without the participation of an adult, and in some cases, children are able to get ahead of adults (for example, in the development of digital technologies). Some scholars believe that education and upbringing is influenced by modern globalization. Migration, high mobility of people create conditions for the growth of linguistic and cultural diversity. In a child, since he often occurs in this age starting at preschool age, a so-called mosaic or hybrid identity arises [4].

Thus, the traditional forms of preschool socialization are being replaced by the so-called digital socialization. As discussed by G.U. Soldatova, E.I. Rasskazova and T.A. Nestik, digital technologies concern family relations, preschool organizations and schools. Currently, many authors identify a new social and cultural-psychological phenomenon - digital childhood as a kind of special historical type of childhood [5].

To a large extent, children are influenced by the Internet, which now serves for a child not only as a way of obtaining information, but it also forms the personal characteristics, emotional, motivational and other spheres of personality. A child receives sensory impressions with the help of digital technologies already from infancy, when parents use special children's tablets that are hung from a child's crib or stroller. Baby monitors become indispensable helpers for young mothers and fathers who are adherents of digital technologies. E.O. Smirnova, M.V. Sokolova, S.Yu. Smirnova and N.Yu. Matushkina state that traditional types of children's activities are being replaced by interaction with gadgets, which affect the mental development of modern children [6].

In the period of 3-5 years, children freely communicate with virtual interlocutors, such as Alice, who can be turned off or ignored at any moment. At the same time, the experience of interpersonal communications is formed at a slow pace. At the age of 6 years, the child is focused

on expanding his social horizons. In the digital age, he, unfortunately, is often limited by success in managing and owning various devices. Currently, children prioritize virtual communication and interaction with mobile devices [7].

The cognitive and personal development of a preschooler takes place in new forms, obeys a different logic, and gives a different result. It is difficult to predict how this result will affect the development of a child's personality in general and the development of society and civilization in the near future, the question remains unclear and causes numerous discussions. However, already now we can say that the full socialization of a child in modern conditions is impossible without digital socialization. The digital identity becomes part of the real identity [8].

G.U. Soldatova, E.I. Rasskazova, T.A. Nestik and E.Yu. Zotova draw attention to some aspects of current social situation that characterize the digital socialization of modern children: mobile digital devices are beginning to be used by children earlier and more widely; the tendency for children to spend most of their free time online; independent spontaneous search by preschoolers for developing, educational and entertaining content of Internet resources and online communication platforms; increasing risks associated with the online environment (including the risk of developing computer addiction from early childhood); the widening gap between the generations of children and parents, the decrease in the importance of the adult in parent-child relationships and as experts in the safe use of digital technologies; the inability of the education system to respond to rapidly growing demands and challenges of the modern digital society, despite the readiness of teachers of the young and middle generations to modernize the educational process; randomness of digital socialization of preschoolers, which is due to difficulties in developing the digital competence of participants in the educational process and the inability to compare the levels of their digital skills in dialogue and reflection between peers, teachers and parents, since there is no such exchange of experience [9].

The above features cannot but affect the development of the personality of a modern preschooler and his relationship with the outside world. Digital technologies are an irreversible phenomenon of our time. The possibilities of digital socialization with a constructive approach and understanding of the features of the digital environment can contribute to the development of each preschool child. Modern realities require new approaches from teachers in organizing educational processes, in-

cluding the solution of educational tasks that, on the one hand, do not interfere with the digital socialization of a preschooler, and on the other hand, ensure his digital security and well-being, taking into account the risks of the digital environment in terms of possible long-term negative consequences [10].

A special role in the digital socialization of a preschooler belongs to the family. Traditionally, the family is the first institution of the child's socialization. Therefore, the problem of forming the psychological readiness of parents for the digital socialization of a preschooler, according to E.V. Gryaznova, A.I. Prokop'eva, I.A. Kravchenya and M.B. Kovchegova, is one of the most essential, especially during the period of quarantine restrictions due to the COVID-19 pandemic [11].

The problems of education, training and development of preschoolers in the digital environment in recent decades have been the subject of active discussions of scientific forums, symposiums, conferences [12; 13; 14; 15]. The modern digital age is characterized by a high rate of change, cardinal innovations in the digital environment, the realities of the pandemic, and the breakdown of international law in solving global issues. Many experts in the field of children's education attach great importance to the formation and preservation of cultural values in the upbringing of children in the digital age. They note the fact that the features of the modern historical era influence the activity of a person and his socialization, but at the same time cultural values exist "outside of a person" and do not lose their relevance in any era [16].

The study of the possibilities of the digital educational environment began a long time ago, but it was the conditions of the pandemic that forced us to conduct an experiment in harsh conditions, when numerous problems immediately appeared, and its risks were revealed. They made us think not only about the features of the introduction of digital technologies, digital literacy of teachers, but also about the degree of influence of the information field on a person, his behavior and decision-making, the role of the digital environment in manipulating minds of children and adolescents [17; 18; 19]. Answers to these questions can be obtained by studying the beliefs, values, behavior, various aspects of the development of the personality of a modern child from a socio-psychological position.

It is also important to answer the question of how relevant pedagogical approaches are in the education and development of preschoolers, which were in demand 10-15 years ago. It is likely that there will be a

need to change the methods, techniques, means and forms of education and training in accordance with the realities of the digital age.

To answer this question, first, it is necessary to study the socio-psychological portrait of a modern child - a preschooler, to identify his differences from his peers who lived at the very beginning of the 21st century. Therefore, we decided to conduct a study, the purpose of which was to find out how much the social and personal characteristics of an average child of 5-7 years old in the early twenties of the 21st century changed compared to the same characteristics and qualities of his average peer of the early 21st century.

After analyzing of previous studies in this area, we developed a questionnaire for teachers of preschool educational organizations, which included questions related to the development of the socio-communicative, speech, artistic, aesthetic, cognitive and physical spheres of older preschoolers. The components of personality development that we took for study reflect those values that were basic in educational activities, both at the beginning of the century and now, which is stated in the Federal State Standard of Preschool Education of the Russian Federation, that is currently in force [20].

The survey involved 60 teachers of preschool organizations currently working and whose experience is at least 15 years. This category of preschool workers is familiar with both the personality traits of a modern preschooler and a preschooler of the “pre-digital” era.

In the first part of the questionnaire, we asked to evaluate on a 5-point scale the level of formation of significant components of the socio-communicative, speech, artistic, aesthetic, cognitive and physical development of a modern preschooler in comparison with their peers of the “zero” years of the 21st century. We will do a comparative analysis of the survey results for each of the above areas.

Let's start our study with social and communicative development. In almost all indicators, a decrease in the level of development of modern preschoolers was revealed. This area of personal development suffered the most. The traditional system of communication is being transformed into online communication, starting from preschool age. On the one hand, virtual communication is safer, on the other hand, it changes the means, the content of communication and the individual personality of a child. Children are beginning to prefer correspondence to a vital format of communication, often using stickers and emoticons, and to a much lesser extent use voice messages and mobile communications.

The attitude of children to the interlocutor also changes, they are less inclined to empathy, because they do not see him in front of them and are much less responsible for the results of communication with him. So, already from the older preschool age, children are faced with the phenomena of cyberbullying, both from the victim and the attacker. This negatively affects the fragile psyche of the child and can cause personality changes in the future.

The results of the survey show that modern preschoolers are less independent, adjust their own activities to a lesser extent, and are prone to infantilism. One of the explanations for this may be the fact that young parents pay too little attention to the development of these qualities in children, because their participation requires a sufficient amount of time, which they prefer to spend on their own gadgets, giving kids the opportunity to work with theirs at this time. The consequence of this, in our opinion, is a decrease in the educational level in terms of such an indicator as social and emotional intelligence, emotional responsiveness, the formation of a respectful attitude and a sense of belonging to one's family and to the community of children and adults in preschools.

One cannot but rejoice the fact that a level of development of children in terms such indicator as the formation of the foundations of safe behavior in everyday life, society, and nature has practically not decreased, but on the other hand, it is alarming that of all other components of socio-communicative development, its level used to be and remains the lowest, which is unacceptable in the modern world. In addition to the formation of the main types of safe behavior of a child, it is necessary to form his skills of safe behavior in the digital environment.

The next sphere of studying the personality of a modern preschooler is the sphere of cognitive development. Comparing results of the survey on the components of cognitive development, we can see a more positive picture. A significant decrease in the cognitive activity of preschoolers is not observed, and according to some indicators, modern preschoolers show similar and even higher results than their "pre-digital" peers (in particular, in terms of the development of imagination and creative activity). We assume this is due to the fact that modern preschoolers have much higher opportunities to learn new things, since digital technologies have become available to them. Voice prompts allow a preschooler to find out the answer to their question immediately, without turning to an adult for help. The quality of answers to the question is determined, among other things, by the visibility provided by the gadget, and not

only by the verbal method. With the help of digital technologies, a child in a playful way can consolidate ideas about sensory standards, objects of the world around him, creatively apply this knowledge, which he does with pleasure.

But there are certain risks in the use of digital technologies in the cognitive development of a child. First, the curiosity and cognitive motivation of preschoolers is reduced. In our opinion, this is because a child can easily learn about something new with the help of the Internet, and this simplicity reduces the child's interest in the very process of learning. On the contrary, the difficulty in obtaining information makes the child's mind inquisitive. Secondly, obtaining information from the Internet does not always provide reliable and accessible information for the child. Some answers may form an inaccurate picture of the child's world, which may affect his personal development. Therefore, teachers and parents need to monitor what information the child requests and receives in their gadgets in order to intervene in time and direct the cognitive development of the child in the direction of his age characteristics.

Next, we do consider the changes taking place in the speech development of a preschooler. Here we also observe a decrease in the level of speech development of a preschooler in all major indicators. In our opinion, this is due to the child's immersion in the digital environment. Earlier it was said that during virtual communication, children preferred non-speech forms. And there is a correlation between these two factors. Modern preschoolers use verbal forms of communication less often, especially in virtual communication, so their speech develops worse than in the pre-digital era, children do not have sufficient verbal communication training, so speech skills develop later and with great difficulty.

The quality of speech is also negatively affected by the fact that children have begun to pay much less attention to reading of children's literature, preferring animation to a book that tells stories in an entertaining visual form. Book illustrations as a visual aid no longer meet the needs of a child; a static picture in a book does not cultivate such interest as a dynamically developing plot on a gadget screen. The speech of animated characters, unlike ones in literature, is poor, the child does not hear the description of nature, interior, literary portraits, therefore, his passive vocabulary is depleted as well as his own speech in general. The situation is aggravated by the fact that modern parents do not tend to read to their child themselves, preferring to occupy his free time with the same gadget.

Let us turn to a comparative analysis of artistic and aesthetic development. The results of a comparative analysis of the components of the artistic and aesthetic development of preschoolers showed that in quantitative terms, the level of development of modern preschoolers in the pre-digital era in this area is the same. That is, in general, the sphere of artistic and aesthetic development of a preschooler has not changed much. But, if we turn to individual indicators of this development, we will see that such an indicator as the formation of elementary ideas about the types of art, the perception of music, fiction, folklore has increased significantly. And we associate this fact also with the advantages of the digital environment. The possibilities of the Internet allow preschool organizations and families to access a huge amount of samples of musical and visual arts and literature, which was not possible at the beginning of the 21st century. There are risks of the formation of a negative artistic taste in children, since the information from the Internet is diverse and not always the works received from the network are a model of taste, but the competent organization of the information security of a child on the part of the teacher and parents is able to minimize these risks.

However, we can also observe a decrease in the level of artistic and aesthetic development of modern preschoolers in terms of some indicators. For example, the level of empathy for the characters of works of art has decreased. We can relate this to the fact that, in general, the level of social and emotional intelligence, emotional responsiveness in modern preschoolers is reduced.

And finally, we come to a comparative analysis of the physical development of preschoolers. Here we can observe a slight decrease in the level of physical development of modern preschoolers. Most of all, the difference is observed in terms of the correct formation of the musculoskeletal system of the body, the development of balance, coordination of movements. We assume that this may also be due to the excessive enthusiasm of children for gadgets when they are in the same position at the computer or mobile phone. Children began to play outdoor games noticeably less, the share of independent motor activity in the daily routine also decreased, which could not but affect the formation of the musculoskeletal system. By analyzing results we see, that children master games with rules and sports games worse, which is associated with a decrease in children's interest in these types of games compared to computer games. However, there is no very large gap between the levels of phys-

ical fitness of preschoolers, and with a certain purposeful pedagogical work, the results of the physical development of modern preschoolers can be improved. The natural physical activity of children, their desire for movement should become the basis and core of the physical education of preschoolers.

Summing up the first part of our study, we can conclude that the modern preschooler and the pre-digital preschooler do not differ much. The digital environment makes its own adjustments in the development of a child's personality, and first of all it concerns the social, communicative and speech spheres, but so far there have been no global changes. Undoubtedly, these features of a modern preschooler must be taken into account when drawing up an educational program and forming individual routes for students.

In the second part of the study, teachers were asked to answer open-ended questions, express their opinion about the development of children in the "pre-digital" era and at the present time. The first question involved an analysis of the factors that influenced the improvement or deterioration of children's developmental indicators.

The main factors determining the difference in the development of children are the emergence of the Internet and computer technologies (70.6%), the change in the nature of children's activities (58.4%), the features of family education (46.4%), the influence of society (34.5%), the conditions of preschool educational organizations (24.2%).

The largest number of respondents noted as significant reasons such as an excess of information, the use of mobile phones and gadgets by children, poor development of communication skills, a low level of pedagogical culture of parents, and a change in the value system. In second place in importance are the following factors: children's lack of interest in productive activities, a change in the pace of life, a decrease in the staff of preschool educational institutions and an overload of educators, low interest in reading, the introduction of new educational technologies, lack of reliance on children's independence, the impact of computer games, low the level of physical activity of children, the negative impact of social networks and the general decline in morality in society.

To the question "Do you think that the changes in the level of development of children according to the above indicators are connected with the digitalization of society, with the active use of mobile and computer technologies by the child?" - the majority of teachers gave an affirmative answer (74%); 18% noted that there are both positive and

negative influences; 7% believe that digitalization and active computer use do not affect the development of children.

Next, the teachers were asked to name the personality traits of a preschool child in comparison at the moment and 10-15 years ago. Analyzing the statements of teachers, we can conclude that modern children are more characterized by individualism, selfishness, increased excitability, rudeness, cruelty, competition, stubbornness, emotional deafness, openness, looseness, self-confidence. Also, such manifestations as perseverance, anxiety, hyperactivity, curiosity, initiative, consumerism, and adaptability were noted.

A portrait of a child 10-15 years ago had such features as friendliness, sociability, diligence, independence, responsibility, responsiveness, tolerance, emotional stability, politeness, curiosity, modesty. Describing the interests of modern preschoolers, teachers name: computer games (37.9%), gadgets (37.8%), robotics (13.7%), foreign cartoons (12%), TV (10.3%), toys from advertising (8.6%), material well-being, status toys and clothes (8.5%), tik-tok, social networks (5.1%). The circle of interests of children of the "pre-digital" era looks like this: playing (25.7%), communicating with peers (24.1%), reading books (17.2%), walking with parents (12%), drawing (10.3%). %, domestic cartoons (5.1%).

Thus, summing up the results of this study, we conclude that the modern preschooler has new interests, the emergence of which is actively influenced by digital socialization. What was relevant and interesting to the children of the 2000 decade is often replaced by an interest in digital technologies, which has both a positive and a negative impact on the development of the personality of a preschooler. No matter how we feel about it, digital technologies have firmly entered the life of a modern child and it is necessary to build educational activities considering the above features.

References

1. Venger AL, Slobodchikov VI, Elkonin BD. Problems of child psychology and scientific creativity of D.B. Elkonina. *Issues of Psychology: Scientific Journal*. 1988;3:29–20.
2. Kon IS. *The child and society*. Moscow: Academy; 2003. 336 p.
3. Leontiev AN. *Psychological issues of the formation of the child's personality in preschool age*. Moscow: Academy; 2015. 289 p.
4. Polivanova KN. Childhood in a changing world. *Modern foreign psychology*. 2016;5(2):10–5.
5. Soldatova GU, Rasskazova EI, Nestik TA. *Digital breed of Russia: competence and security*. Moscow: Meaning; 2017. 375 p.

6. Smirnova EO, Sokolova MV, Matushkina NYu, Smirnova SYu. Study of age-related addressing of cartoons. *Cultural-historical psychology*. 2014;10(4):36-27.
7. Denisenkova NS, Krasilo TA. The development of preschoolers in the era of digital socialization *Modern preschool education*. 2019;6(96):57-50.
8. Soldatova GU. Digital socialization in the cultural-historical paradigm: a changing child in a changing world. *Social psychology and society*. 2018;9(3):80-71.
9. Soldatova GU, Nestik TA, Rasskazova EI, Zotova EYu. Digital competence of adolescents and parents. Results of the all-Russian study. Moscow: Internet Development Fund; 2013. 144 p.
10. Baginskaya ES. Digitalization of preschool education: psychological problems *Scientific opinion*. 2021;12:167-163.
11. Gryaznova EV, Prokop'eva AI, Kravchenya IA, Kovchegova MB. Readiness of parents to participate in distance education of children in preschool educational institutions: to the formulation of the problem. *Global scientific potential*. 2020;12(117):53-51.
12. Asmolev AG. *Anthropology of Everyday: Transformation of Human Behavior under Technological and Social Change*. Lurian Journal. 2021;2(1):18-6
13. Actual problems of cultural-historical psychology: materials of the First International Symposium on Cultural-Historical Psychology. Novosibirsk: Publishing House of NGPU; 2020. 508 p.
14. Scientific research in the context of digitalization: world experience and national priorities collection of articles of the International Scientific and Practical Conference. Ufa: Aeterna; 2020. 248 p.
15. Digitalization as a factor in the development of science and education: proceedings of the International Scientific and Practical Conference. Petrozavodsk: ICNP "New Science"; 2021. 126 p.
16. Kozlova MP. Problematic aspects of sustainable development of children in the context of childhood transformation. *Tribune of the scientist*. 2021;9:101-98.
17. Kameneva IYu. Risks of psychological security in the digital educational environment associated with the weakening of personal contact. In the collection: *Psychologically safe educational environment: design problems and development prospects*. Proceedings of the III International scientific-practical conference. Cheboksary; 2021. p.146-144.
18. Karakozov SD, Pikalova LR, Sedova EP, Titova ON. Development of the digital educational environment in the Russian Federation: development mechanisms and possible risks. *Rostov scientific journal*. 2018;11:100-85.
19. Molyanova TP. Preschool education and digitalization: problems and risks. *Osov Pedagogical Readings "Education in the Modern World: New Time - New Solutions"*. 2021;1:346-342.
20. On approval of the federal state educational standard for preschool education. Order of the Ministry of Education and Science of Russia dated October 17, 2013 No. 1155 [Internet]. [cited 2022 Apr.2]. Available from: <https://docs.edu.gov.ru/document/7dcd2fd1d14f608ec97e9ef6699f99ae/>



INTEGRATED APPROACH IN PERSONALITY-ORIENTED PSYCHOLOGICAL COUNSELING

Svetlana Domracheva, Irina Dremina

Abstract. The article focuses on the substantiation of the integrative approach to individual person-centered psychological counseling. It examines the theoretical basis of integration in modern psychotherapy and psychological counseling, as well as the differences between the integrative and eclectic approaches. The article includes the results of the comparative analysis of the main concepts of psychological aid from the point of view of the integrative approach and describes several integration models. It presents the results of the empirical study of the psychological counseling possibilities from the point of view of the integrative approach. The authors analyzed special cases from their counseling practice and revealed the correlation of the employed methods with the existential and humanistic approach as the main one. They summarized methods of psychological aid used by practical psychologists in the city of Yoshkar-Ola and established what kind of methods they would want to study additionally and use in counseling. The authors found out that the methods of art therapy and behavioral psychotherapy are most frequently used by psychologists. They determined advantages and disadvantages of the integrative approach in counseling. The analysis of personal experience in counseling made it possible to systematize and summarize the cases of 74 clients which included more than 400 sessions. Consequently, the article identifies main components of the integrative approach and proposes the author's model of the conditions for its implementation by consulting psychologists.

Keywords: eclectic, integration, integrative approach, consulting psychologist, psychological counseling, psychological aid, psychotherapy.

1. Introduction

According to experts, the modern practice of psychological aid includes 800-1000 methods and models of psychotherapy and psychological aid. Their number is increasing with each passing year, and not a single psychologist can fully master them all. In practice, the efforts of Russian psychologists to use the best methods developed by modern psychotherapy turn out to be a simple mixing of different methods without adequate understanding of the mechanism of their operation. In fact, it is an eclectic approach. In the Big Dictionary of Foreign Words the term eclectic refers to an external connection of views and methods which cannot be combined internally. At the same time, *integration* is a unification of different elements on a common basis [3].

Modern psychotherapy and counseling psychology in Russia have a contradiction between the rapid growth of quantity of psychological aid methods, on the one hand, and the need for practice which requires the development of a universal approach that could be used by all practical psychologists. There is a pressing need for understating, summation and integration of the huge theoretical and practical body of experience which has been obtained in every area of psychological aid. E.G. Eide-miller thinks that “the main tendency in the development of modern psychotherapy is the creation of integrative methods and models” [24, p. 20].

The statements above call into question the relevance of the development of the integrative approach which would not only be based on a broad variety of different psychological concepts and methods, but could also show us their resemblance and give a particular background information to the psychologist. The creation of an integrative approach in counseling is a challenging task which is at the crossing point of three elements: method – client – psychologist.

2. Conceptual framework

The concept of integration in psychotherapy dates back to the end of the XX century. But for counseling psychology, this idea is new and poorly studied. In counseling, the integrative approach is understood as the unification of various methods of psychological aid on the basis of one or several theoretical concepts. As V.A. Vinokur claims [5], in the XXI century, the concept of integration of different psychotherapeutic methods has become a field of active practical use. During this time, there has been a significant increase in publications on problems of integrative psychotherapy in professional specialized magazines. As J. Prochazka and G. Norcross point out, “The psychotherapeutic spirit of the XXI century will be expressed by one or more variants of psychotherapeutic integration” [16].

However, there are also arguments against psychotherapeutic integration. Thus, according to G.L. Isurina, integrative psychotherapy is a myth connected with the reluctance of psychotherapists to define themselves theoretically and their lack of systematic training. The main argument in this case is that the theoretical basis of psychotherapy is the psychology of personality. And there is no integrative theory of personality, because different theories are based on very different worldviews. However, according to V.A. Vinokur [5], debates between supporters of certain theoretical positions in psychotherapy are gradually becoming

less acrimonious and more argumentative and concrete, which leads to their convergence.

The purpose of the study was to substantiate the integrative approach in psychological counseling on the basis of the analysis of theoretical sources and empirical experience. The hypothesis of the research was that the integrative approach in psychological counseling is in its formative stage and requires theoretical substantiation and summation of experience as well as additional professional training of psychologists.

Research objectives:

1. To study the theoretical basis of integration in psychotherapy and psychological counseling, to analyze the basic concepts of psychological aid from an integrative approach and to present various conceptual models of integration.

2. To study the directions and methods of psychological aid used by practical psychologists and to summarize personal experience of psychological counseling from the integrative approach positions.

3. To identify and characterize the main components of the integrative approach in psychological counseling and formulate requirements for its application by psychologists.

Research methods: analysis of theoretical sources, analysis of personal experience in counseling, questionnaire survey of practical psychologists.

The theoretical basis of the research was E.G. Eidemiller's statements about creating integrative methods and models as the main trend in the development of modern psychotherapy [24], V.A. Tashlykov's positions about the prerequisites for developing an integrative movement in psychotherapy and psychological counseling [20; 21], B.V. Ovchinnikov's views on the tendency toward convergence - the integration and unification of various approaches [14]. The ideas of Russian psychologists A.A. Alexandrov, B.D. Karvasarsky, V.V. Kozlov, B.V. Ovchinnikov, E.G. Eidemiller concerning various options of integration and use of general factors of psychological counseling and psychotherapy [2; 7; 8; 9; 10; 13; 24] were also considered.

The novelty of the research consists in summarizing and making sense of the empirical material of consultative experience from the standpoint of the integrative approach, identifying the main components of the integrative approach and formulating the requirements for its application by practical psychologists. Theoretical significance of the research consists in substantiation of the integrative approach in psychological counseling and characterization of its basic components.

V. A. Tashlykov [21] identifies the following preconditions for the development of the integrative movement in psychotherapy and psychological counseling:

1. The crisis caused by the large number of methods of psychological aid requires a search for common basic processes for all directions.

2. There is a growing recognition that different psychotherapeutic modalities may have more similarities than differences.

3. Numerous comparative studies of the effectiveness of various psychotherapeutic modalities have determined their approximately equal effectiveness. We can only talk about the advantage of certain methods for certain types of clients.

4. Representatives of all directions recognize the essential role of a psychotherapist's or psychologist's relationship with the client.

5. The development of short-term and eclectic methods in psychological aid is a demand of the time.

6. A number of psychotherapists and psychologists apply the eclectic method, and try to adapt a concrete method to personal traits and necessities of their clients.

The fundamental concepts of the personality and what should be corrected in it are different according to the approaches. However, if analyzing the goals of psychological aid, we can conclude that they have something similar behind the terms like "reconstruction", "modification", "self-development", "construction", "personal growth", etc. Each of these aims not only to get rid of psychological suffering, but also to improve the maintenance level of an individual. This goal joins all psychological aid directions. However, in fact, each direction reflects the complexity, manysidedness and level-structured of human personality by highlighting one of its facets. It is impossible to give a unified and complete explanation of the human personality in the framework of one concept or direction.

Findings of the theoretical study:

1. There are two main trends in the contemporary theory and practice of psychological aid: on the one hand, it is differentiation - the division and creation of new psychological theories and schools; on the other hand, it is movement to integration, to synthesis of the psychological knowledge.

2. The idea of integration in psychotherapy and counseling has supporters and opponents. However, the truly integrative theory is still absent despite the fact that tendency to integration in application area of psychology is progressing well.

3. There are different occasions for the integration of psychological aid methods with other theoretical bases. The analogy of psychological mechanisms of corrective and therapeutic effect might be considered the basis of the integrative approach in psychological counseling.

3. Results

In the work “Challenges and Typical Mistakes of the Beginning of the Therapy” Director of the East European Institute of Psychoanalysis in St. Petersburg M.M. Reshetnikov points out ten main reasons why people are seeking psychological and psychotherapy aid, covering the possible options [17]:

- 1) relationships with a spouse or partner;
- 2) problems with self-image;
- 3) problems of low self-esteem;
- 4) difficulties with establishment or maintenance of an intimate relationship;
- 5) difficulties in relationships with other family members;
- 6) feeling of loneliness, fear, depression, anger, warring;
- 7) mind-body problems;
- 8) difficulties with dealing life's problems;
- 9) career and relationship problems in society;
- 10) too high emotional reactions to events.

People usually see a psychologist for these kinds of requests, though some problems may need the aid of a psychotherapist. There are different reasons why people appeal to a psychologist instead of a psychotherapist. Consulting psychologists deal with a range of problems and situations that demand a deep understanding of person's psychology and knowledge about different methods of psychological aid. That's why it's no wonder that the tendency to converge even an eclectic mix between completely different approaches and methods in practical psychological work is becoming more and more pronounced.

In our view, the main benefit of eclectic-methods mix as part of the integrative approach is not only the using of the best methods from different schools, but also the possibility of establishing a balance between the counseling principle to *follow* and *interact* with the client, and the psychotherapeutic principle to *lead* and *influence* the client. The advantage of the integrative approach is that it connect psychological counseling and psychotherapy. Carl Rogers, the founder of the humanistic client-centered approach, used the terms “counseling” and “psychotherapy” as interchangeable, equivalent. It seems justified, since they both

relate to direct contacts with people aimed at changing their mental tenets and behavior.

The analysis of personal counseling experience was carried out as part of empiric study. 74 client cases were systematized and summarized. Their duration varies from 1 to 43 sessions - meetings with the client.

The analysis of client requests showed that in the first place there are requests for symptom relief, that is, for getting rid of unpleasant experiences and emotional states - 39%. These are emotional states such as guilt, resentment, fear, anxiety, depression, anger, emotional dependence. In the second place in terms of the number are the requests for help in self-development - 26% and self-understanding - 16%. Then there are the requests for personality transformation and life scenario changes that require longer and more complex work of a psychologist - 12%. The requests for information and assistance in making decision are less common than others, only 7%.

Then the analysis of personal experience of counseling was carried out in order to determine the methods of psychological aid related to different psychological schools. The existential and humanistic approach was the main one, it was used in almost 100% of cases. Then there are: Gestalt therapy - 35%, emotional-image therapy - 24%, behavioral and cognitive approaches - 20% each, psychosynthesis - 16%, art therapy - 15%, guided affective imagery - 12%, body-oriented techniques - 9%, transactional analysis, trance-like and meditation techniques - by 8%. Psychoanalysis, neuro-linguistic programming (NLP) and psychodrama were not used in counseling. Two or three different methods could be used with the same client. The integration of various methods enabled to work with a wide range of client problems and requests. The wider the range of psychological aid methods, the more effectively and quickly client's problem can be solved.

Personal experience of psychological counseling confirms that within the framework of one methodological approach - existential and humanistic - methods of other psychotherapy areas can be successfully applied: psychosynthesis, symbol drama, emotional-imaginative therapy, cognitive and behavioral approaches. Their choice is determined by client's individual characteristics and the possibilities of the method in relation to a particular case.

One of the tasks of the empirical research was to find out what psychotherapeutic modalities psychologists use in their work, and what

methods they would like to study and use. The results of the study are included in table.

| No. | Methods of psychological aid | Applied in practice | Selected for training |
|-----|-------------------------------------|---------------------|-----------------------|
| 1 | Psychoanalysis | 0 | 21 |
| 2 | Behavioural Approach | 50 | 21 |
| 3 | Cognitive Approach | 36 | 56 |
| 4 | Existential and Humanistic Approach | 7 | 21 |
| 5 | Gestalt Therapy | 14 | 64 |
| 6 | Art Therapy | 100 | 56 |
| 7 | Body-oriented Approach | 43 | 71 |
| 8 | Psychosynthesis | 7 | 14 |
| 9 | Psychodrama | 7 | 64 |
| 10 | Guided Affective Imagery | 7 | 28 |
| 11 | Positive Psychotherapy | 14 | 43 |
| 12 | Transactional Analysis | 7 | 28 |
| 13 | Emotional and Imaginative Therapy | 8 | 15 |
| 14 | Trance-like and Suggestive Methods | 7 | 7 |
| 15 | Neuro-Linguistic Programming (NLP) | 14 | 14 |
| 16 | Other | 7 | - |

Tab.1 Psychotherapeutic modalities used by psychologists and chosen for training

Art therapy is the undisputed leader, it is used by all psychologists. In terms of frequency of use the behavioral approach comes second - 50%, followed by body-oriented approach - 43%, and cognitive approach - 36%. The remaining methods are used rarely and situationally, from time to time. Psychoanalysis is not used by any of the interviewed psychologists. Although, as Patriarch of Russian psychotherapy B.D. Karvasarsky said, “one cannot act professionally in any of psychotherapeutic modalities without knowledge of the basics of psychoanalysis” [quoted after: 17, 19].

It was also revealed that some methods of psychological aid have not been mastered by psychologists enough, so psychologists would like to study them further. Psychologists are most interested in body-oriented methods - 71%, Gestalt therapy and psychodrama - 64% each, as well as cognitive approach and art therapy - 56% each. At the same time, psychologists have virtually no interest in neuro-linguistic programming, psychosynthesis and suggestive methods. The survey showed that this is

due both to psychologists' lack of information about these methods, and to the idea of their complexity.

Thus, psychologists generally follow no single type of psychological aid, in fact, they use an eclectic approach which justifies itself in practice. The current situation of an eclectic mix of different methods confirms the need to develop an integrative approach once again.

For reference, here is the data of a study by A.F. Bondarenko [4], the purpose of which was to find out what psychological theories are used by consulting psychologists in Russia. The study showed that Gestalt therapy, existential and humanistic approach and behaviour therapy were the most commonly used. Thus, it turned out that psychologists both in Yoshkar-Ola and in Russia as a whole often use a behavioural approach, but psychologists of the city of Yoshkar-Ola rarely use Gestalt therapy and existential and humanistic psychology.

We are close to S.S. Stepanov's idea that scientific psychology in Russia is virtually disappearing, displaced by practical psychology, which is self-sufficient in the worst sense, and almost independent of psychological science. S.S. Stepanov writes about the crisis of scientific research, resulting in theses that no one reads, or in papers for private circle of academic colleagues. In contrast, he suggests a different approach, the essence of which is to enrich science through practical experience: "Today, a huge practical experience is scattered in cities and towns like a gold field, which only need to be collected and cast into priceless ingots" [19, 85]. Talking about the current problems of the counseling psychology, A.N. Elizarov suggests developing new research methods, and special attention should be paid to the methodology of *reflexive analysis of subjective experience*. The bases for this methodology are laid in the works of humanistic psychologists [6].

Let's summarize the main results of the study.

The components of the integrative approach in psychological counseling are identified and characterized as follows:

- 1) knowledge of foreign and domestic theories of personality;
- 2) understanding the causes and mechanisms of the origin of psychological problems;
- 3) an idea of the general mechanisms of psychological/correctional action;
- 4) an idea of the stages and dynamics of the counseling and therapeutic process;
- 5) knowledge of practical methods and techniques of psychological aid;

6) personal counseling experience.

Let's consider these components separately.

1. Knowledge of foreign and domestic theories of personality.

Consulting psychologists should be familiar with the basic theories of world psychology on personality in at least three leading directions: psychoanalytic, cognitive and behavioural, as well as an existential and humanistic. At the same time, they can use any of these areas or schools existing within them as a basis for their practical work. This approach will broaden the consultants' ideas of the complex multilevel structure of human personality, which cannot be fully explained by any of the existing psychological concepts.

2. Understanding the causes and main mechanisms of the origin of psychological problems and difficulties.

These mechanisms and causes are described differently by different authors in different psychological schools. Therefore, the same mental property or condition is characterized by a specific psychological language using different terminology. Knowledge of the causes and mechanisms of the origin of psychological problems can help the psychologist to understand and refine the client's request, to understand the reasons of the difficulties and choose the "target" of psychological influence more precisely. At the same time, the psychologist can cover a fairly wide range of psychological problems or specialize in their certain types.

3. The idea of the general mechanisms of psychological influence and psycho-correction.

The analysis of literature sources has shown that the majority of authors identify the general mechanisms of psycho-correctional actions which can be classified in three basic groups: cognitive, emotional and behavioural.

4. The idea of the stages and dynamics of the counseling process. The counseling process is not unsystematic, it has its own internal logic and a sequence. In the course of personal counseling experience, a psychologist can learn to understand the client's internal dynamics of change. But first, the specialist must have an idea about the stages of this process, which can vary in different areas of psychological aid and have disparate numbers. Most authors distinguish between four and seven stages. Based on the generalization of the ideas of such authors as A.E. Ivy, R. Kociunas, R. May, B.V. Ovchinnikov, N.I. Olifirovich,

S.L. Solovyeva and V.N. Tsapkin [1; 11; 12; 14; 15; 18; 23] about the consultative process, the following counseling stages are identified:

- Information gathering about the client's problem: contact establishing, interviewing, problem understanding and defining the request.
- Study of the problem: analysis of its causes, mechanisms for the formation of symptoms, formulation of a hypothesis about the problem causes and possible ways to solve it.
- Selection and discussion of options for solving the problem: search for alternatives and resources.
- Problem-solving activity: application of specific techniques and methods aimed at changing the client's thoughts, emotional state and behavior (psycho-correction).
- Evaluation of results achieved and feedback.

The stages can vary depending on the client's specific problem and request.

5. Knowledge of methods and techniques of psychological aid.

A psychologist who chooses an integrative approach can begin by mastering methods of any area of psychological aid. A specialist can integrate them with other methods, understanding the mechanisms of their psychological effects and the changes they produce in the client.

One can consider awareness to be the basic integrating factor in counseling. Consciousness and self-awareness are the part of the highest stage of the human psyche development. Therefore, almost all methods of psychological aid are aimed at increasing awareness of one's own difficulties and ways to get rid of them. A client, who has seen a psychologist to discuss any problem, needs to become aware of the following: what changes he or she has, what are the reasons of the difficulties, what can be done about it and in what way to solve this problem or resolve a difficult situation.

6. Having personal experience in counseling.

A psychologist will not be able to use an integrative approach in counseling immediately after receiving a psychological degree. It is possible only in the process of accumulating personal experience in counseling and obtaining additional education in various areas of psychological aid. A beginner psychologist without experience is likely to start with an eclectic approach, acting on the principle of "I apply what I know." This eclectic stage needs to be passed in order to gain experience in using various methods, to understand what is going on in the mindscape of the client and what the target of corrective influence can be.

Thus, it is possible to identify the main conditions for psychologists to apply the integrative approach, namely:

1. Knowledge of the theoretical foundations of personality psychology, basic concepts of personality, their similarities and differences.

2. Knowledge of the main directions of modern psychotherapy (psychoanalysis, cognitive, existential and humanistic) as well as other methods chosen on the basis of personal preferences of the psychologist.

3. Understanding the mechanisms of functioning of psyche and how people themselves or with the “help” of the environment create their psychological problems.

4. Ability to use and complement the two main counseling strategies: counseling “from the request” and counseling “from the client”.

5. Ability to apply and combine various methods and techniques of psychological aid, deeply understanding the meaning of their influence on the psyche.

6. Having practical experience in counseling, the skill of experimentation, creative application of various methods.

7. Continuous training, professional self-development and further training.

Thus, as the psychologist gains consultancy experience, he or she will be able to gradually pass from an eclectic approach to an integrative-eclectic one, and then to an integrative one as the bundle of theoretical and practical experience grows. In practice, this may look like a move from method-oriented counseling (“what I know, what I apply”) to request-oriented counseling (“I work with certain types of problems”), and then to client-oriented counseling (“I do what the client needs”).

4. Conclusions

1. Personal experience of counseling and analysis of client requests has shown their diversity, which requires from psychologists to master various methods of psychological aid. Some methods of psychological aid are not sufficiently mastered by psychologists, which requires further training of psychologists after their basic education.

2. Practical psychologists do not adhere to any method in consulting work, but use an eclectic approach that justifies itself in practice. The situation of an eclectic mix of different methods once again confirms the necessity and relevance of developing an integrative approach.

3. The main components of the integrative approach in psychological counseling are outlined, namely: knowledge of basic personality theo-

ries; understanding the causes and mechanisms of the origin of psychological problems and difficulties; understanding the general mechanisms of psychological action; understanding the stages and dynamics of the counseling process; knowledge of various methods of psychological aid and practical experience of their use.

4. The conditions of application by practical psychologists of the integrative approach in psychological counseling have been determined.

5. The integrative approach in psychological counseling has both advantages and disadvantages. Its main disadvantages are that it imposes more serious requirements than usual for professional training of psychologists. No person is capable of mastering all or at least the basic methods of psychological aid; therefore, constant professional development of a psychologist, self-education and advanced training in the area of psychological aid methodology is necessary. The advantages of integration lie in the fact that psychologists are able to take advantage of the bundle of knowledge of theory and methods that were accumulated in world experience in counseling and psychotherapy.

The study confirmed the hypothesis that the integrative approach in psychological counseling is in its formation stage and requires theoretical substantiation and summation of experience as well as additional professional training of psychologists.

However, the problem of developing an integrative approach in consultative psychology requires further development. If in psychotherapy, there is already a certain amount of research on this topic, then in the field of psychological counseling, it is almost non-existent. In both fields of psychological aid (psychotherapy and counseling) the question of the practical foundations of the integrative approach is still open. We share the point of view of A.N. Elizarov and S.S. Stepanov [6; 19], and we believe that special attention should now be paid to the reflexive analysis of the subjective personal experience of psychologists, so the enrichment of science through practice.

References

1. Ivy AE. Psikhologicheskoe konsultirovanie i psikhoterapiya: Metody, teorii i tekhniki: Prakticheskoe rukovodstvo [Psychological counseling and psychotherapy: Methods, theories and techniques: A Practical guide]. Moscow, AST; 1999.
2. Alexandrov AA. Integrative model of pathogenetic psychotherapy. Sovremennaya psikhoterapiya [Modern psychotherapy]. Saint Petersburg, Academic Project; 1997. pp. 268-282.

3. Bolshoi slovar inostrannykh slov [A large dictionary of foreign words] (comp. A.Yu. Moskvina). Moscow, Tsentrpoligraf Publishing House; 2008. 685 p.
4. Bondarenko AF. Personal and professional self-determination of a Russian psychologist practitioner. *Moskovsky psikhoterapevtichesky zhurnal* [Moscow Psychotherapeutic Journal]. 1993;1:63-77.
5. Vinokur VA. Integrative psychotherapy and the "butterfly effect". *Rossiysky psikhoterapevtichesky zhurnal* [Russian Psychotherapeutic journal]. 2012;1-2(2-3):36-40.
6. Elizarov AN. Psychological meaning, subject and tasks of counseling psychology. *Vestnik psikhosotsialnoy i korrektsionno-reabilitatsionnoy raboty* [Bulletin of psychosocial and correctional rehabilitation work]. 2004;2:23-30.
7. Integrative aspects of modern psychotherapy. *Sbornik nauchnykh trudov NII im. VM Bekhtereva*. [Collection of scientific papers of the V.M. Bekhterev Research Institute]. vol. 131. St. Petersburg; 1992. 160 p.
8. Karvasarsky BD. Integrative aspects of psychotherapy: basic concepts and prospects of development. *Integrativnye aspekty sovremennoy psikhoterapii* [Integrative aspects of modern psychotherapy]. St. Petersburg; 1992.
9. Kozlov VV. *Intensivnye integrativnye psikhotehnologii: Teoriya. Praktika. Eksperiment.* [Intensive integrative psychotechnologies: Theory. Practice. Experiment.]. Moscow; 1998.
10. Kozlov VV, Novikov VV. Integrative approach in psychological practice. *Iaroslavsky pedagogichesky vestnik* [Yaroslavl Pedagogical Bulletin]. 2012;1(2):37-45.
11. Kociunas R. *Osnovy psikhologicheskogo konsultirovaniya* [Basic psychological counseling principles]. Moscow: Academic Project, Trikssta; 2008. 464 p.
12. Kociunas R. *Osnovy psikhologicheskogo konsultirovaniia* [Basic psychological counseling principles]. Moscow: Academic Project; 1999.
13. May R. *Iskusstvo psikhologicheskogo konsultirovaniya* [The Art of psychological counseling]. Moscow, Gardariki; 1994.
14. Ovchinnikov BV. Scientific substantiations of psychotherapy as a way to its integration. *Zhurnal prakticheskogo psikhologa* [Journal of a practical psychologist]. 2009;4:94-103.
15. Ovchinnikov BV. Psychotherapy in the modern world. *Zhurnal prakticheskogo psikhologa* [Journal of a practical psychologist]. 2009;4:24-33.
16. Olifirovich NI. *Individualnoe psikhologicheskoe konsultirovanie: Te-oria i praktika* [Individual psychological counseling: Theory and practice]. Moscow, Theseus; 2005. 264 p.
17. Prochazka J, Norcross G. *Sistemy psikhoterapii* [Systems of psychotherapy]. St. Petersburg, Primevrozna; 2005. 384 p.
18. Reshetnikov MM. *Trudnosti i tipichnye oshibki nachala terapii* [Difficulties and typical mistakes of the beginning of therapy]. St. Petersburg, East European Institute of Psychoanalysis; 2009. 243 p.

19. Solovyova SL. Psychological counseling. Spravochnik prakticheskogo psikhologa [Handbook of a practical psychologist]. St. Petersburg, Rech'; 2010. 640 p.
20. Stepanov SS. Mezhdru nami, psikhologami [Between us, psychologists]. Moscow, Genesis; 2003. p. 26-34.
21. Tashlykov VA. Integration models in psychotherapy. Rossiisky psikhoterapevtichesky zhurnal [Russian Psychotherapeutic journal]. 2012;1-2(2-3):25-27.
22. Tashlykov VA. General factors of psychotherapy as one of the prerequisites of integrative psychotherapy. Integrativnyye aspekty sovremennoy psikhoterapii [Integrative Aspects of Modern Psychotherapy]. St. Petersburg; 1992.
23. Wilbur K. Integralnaya psikhologiya [Integral psychology]. Moscow, AST; 2004. 330 p.
24. Tsapkin VN. Unity and diversity of psychotherapeutic experience. Psikhologicheskoe konsultirovanie i psikhoterapiya [Psychological counseling and psychotherapy]. Vol. 1, Theory and methodology. Moscow; 2005. pp. 22-51.
25. Eidemiller EG. Problems of integration in modern psychotherapy: pros and cons. Rossiisky psikhoterapevtichesky zhurnal [Russian Psychotherapeutic Journal]. 2012;1-2(2-3):20-24.



SOCIAL PRACTICE IN PROFESSIONAL TRAINING OF INTENDING TEACHERS OF PRESCHOOL EDUCATIONAL INSTITUTIONS

Natalia Chaldyshkina, Olga Shestakova, Natalya Kornilova

Abstract. The article reveals the concept, the specific features and the potential of socio-cultural practices and their role in professional training of intending teachers of preschool educational institutions. The theoretical background of the work are modern scientific researches in this field. The requirements for professional training in accordance with regulatory documents are also considered. The authors describe the competences developed in the process of professional training of intending teachers for preschool educational institutions and the socio-cultural practices of ethno-cultural and socio-pedagogical orientation organized for university students. The article presents the analyzes of the survey results “The ability to implement socio-cultural practices” which was conducted among students. The assessment was carried out according to the following competences: “Teamwork and leadership” (the indicator “Ability to carry out social interaction and realize one’s role in the team”), “Intercultural interaction” (the indicator “Ability to perceive intercultural diversity of the society in socio-historical, ethical and philosophical contexts”), “Students’ joint and individual educational activities” (the indicator “Ability to organize joint and individual educational activities of students, including those with special educational needs, in accordance with the State Educational Standard”), “Development of educational teaching environment” (the indicator “Ability to carry out spiritual and moral education of students on the basis of the core national values”). The authors express their point of view concerning the necessity of studying the potential of socio-cultural practices, evaluating the competences and the abilities developed in the process of professional training of intending teachers for preschool educational institutions

Keywords: socio-cultural practices, professional training, intending teachers, preschool education, competencies, abilities.

Training of intending teachers is associated with a significant expansion of professional competencies in the field of educational activities. Regulatory documents containing a social demand regarding intending teachers’ training reveal the basic principles and requirements of the socio-cultural and intercultural interaction in the professional environment of young teachers.

The state policy and legal regulation of relations in the field of education, in accordance with the Federal Law “On Education in the Russian Federation”, are based on the principle of the educational space unity

on the territory of the Russian Federation, protection and development of ethnic and cultural identities and traditions of the peoples of the Russian Federation in a multinational state, which is of great importance for professional training of intending teachers of preschool educational institutions (Article 3, paragraph 4) [1].

Professional Standard “Teacher (educational activities in the field of preschool, primary school, and secondary school education) (educator, teacher)” imposes special requirements on intending teachers applied by employers. They are the following. Necessary knowledge: fundamentals of psychodidactics, multicultural education, ways of behavior in social networks; fundamentals of educational work methodology, basic principles of activity approach, types and techniques of modern educational technologies; patterns of building child-adult communities and their socio-psychological characteristics.

Necessary skills: to build educational activities taking into consideration children’s cultural differences, their gender, age and individual characteristics; to find the value aspect of knowledge and information, to ensure its understanding by students; to form child-adult communities.

Professional actions: designing situations and events that develop the child’s emotional and value sphere (culture of experiences and value orientations of the child); developing tolerance and behavior skills in the changing multicultural environment [2].

In accordance with the State Educational Standard of Higher Education, students pursuing a bachelor’s degree in the field of study 44.03.02 “Psychological and pedagogical education” (program “Psychology and pedagogy of preschool education”) develop universal and general professional competencies, including socio-cultural and intercultural competencies in the process of their vocational training [3].

The Federal State Educational Standard of Preschool Education describes the principles of preschool education that intending teachers are to master and apply in their professional activities. These principles are supporting children’s initiative in various activities; introducing children to socio-cultural norms, traditions of the family, the society and the state, national values and traditions; taking into consideration ethno-cultural situations [4].

N.D. Kaminskaya, E.V. Ertman, V.A. Cover suppose that these documents focus on the task of updating professionally oriented actions of intending teachers that is based on acquiring socio-cultural, cultural, intercultural technologies and methods in educational process; arrang-

ing and participating in the events that contribute to transferring the pattern of the teacher’s professional and social activities; forming a dialogical environment between the participants of a child-adult groups, independent, active and responsible cooperation with a preschool educational institution [5].

To make the process of training intending teachers of preschool educational institutions we have identified two relevant groups of socio-cultural practices:

1. Socio-cultural practices of ethno-cultural orientation: “National holiday”, “Folk games”, “Folk toys”.

2. Socio-cultural practices of socio-pedagogical orientation: “Charity event”, “Inclusive dance”, “Educational web-quest”.

Table 1 shows the competencies developed in the process of professional training and the corresponding socio-cultural practices implemented in professional training of intending teachers of preschool educational institutions.

| Code and name of the competence | Definition of the competence that is developed | Name of socio-cultural practice |
|---|--|---|
| Universal competence-3 – teamwork and leadership | ability to carry out social interaction and realize one’s role in the team | "National holiday", "Charity event", "Educational web-quest" |
| Universal competence-5 – intercultural interaction | ability to perceive intercultural diversity of the society in socio-historical, ethical and philosophical contexts | "National holiday", "Folk games" |
| General professional competence-3 – students’ joint and individual educational activities | ability to organize joint and individual educational activities of students, including those with special educational needs, in accordance with the State Educational Standard | "Folk games", "Folk toys", "Inclusive dance", "Educational web-quest" |
| General professional competence-4 – development of educational teaching environment | ability to carry out spiritual and moral education of students on the basis of the core national values | "National holiday", "Folk toys", "Charity event" |

Tab. 1 The competencies developed in the process of professional training and the corresponding socio-cultural practices implemented in professional training of intending teachers of preschool educational institutions

While studying such disciplines as “Psychological and pedagogical workshop”, “Fundamentals of spiritual and moral education”, “Social and communicative development of preschoolers”, “Fundamentals of spiritual and moral education of preschoolers”, “Pedagogy”, “Social pedagogy”, “Methods of musical education of preschool children”, “Intercultural communication”, “Content and organization of inclusive education”, “Children’s literature”, intending teachers develop these competencies for the effective professional activities at preschool educational institutions.

It is necessary to consider the essence and content of the concepts “socio-cultural practices”, “social practices”, “cultural practices”, “ethno-cultural educational practices”, “socio-pedagogical practices”.

The theories of social and socio-cultural practices were considered in the works by P. Bourdieu, A.V. Zapesotsky, V.V. Nikolina, and other scientists as a joint activity based on the individual’s acquisition of norms, values, patterns of activities and accumulation of socio-cultural experience, as any form of activity manifested in a socio-cultural system [6; 7; 8].

V.V. Nikolina describes socio-cultural practice as the individual’s activities encouraged by his/her universal need for cultural and practical creative activities in accordance with the norms, traditions, rules, and values of the society [8]

Russian Encyclopedia of Social Worker defines social practice as “... a type of practice during which a definite historical person changes the society and develops himself/herself by using public institutions and organizations, and influencing the system of public relations. In the narrow sense these are situations in which a person receives social experience” [9, 773].

A.M. Goreev points out that socio-cultural practices contribute to increasing the level of cultural development of intending teachers, developing necessary competencies, acquiring cultural space, and gaining experience in social interaction [10].

“Cultural practices” are characterized by M.Y. Zaboeva, V.P. Bolshakov, N.Yu. Sosunova, T.B. Shurilova, and some other researchers as various, ordinary kinds of the child’s independent activities, his/her behavior, mental, spiritual and moral well-being based on the child’s current and prospective interests, the child’s unique individual life experience of being and co-being with other people which develops from the first days of the child’s life. The child begins practicing these types of activi-

ties and behavior as interesting for him/her and providing self-determination and self-realization (collecting, writing poems or fairy tales, creating handmade books and many other activities) [11; 12; 13]. According to V.P. Bolshakov, cultural practices are activities of social cultural institutions (museums, libraries, clubs, houses of culture, art schools, universities of culture and arts, etc.) [12].

The concept of ethno-cultural educational practices is currently new for science. There is no detailed description of this concept in scientific literature. It is a new notion in the system of higher education. S.N. Fedorova and N.A. Kornilova determine ethno-cultural educational practices as various forms of introducing children to national culture based on different ethno-cultural experiences [14, 15]. A. Acosta points out that the development of the child's ethno-cultural identity takes place in his/her immediate social environment while participating in traditional events of his/her own and other ethno-cultural groups [15]. It is important to take these characteristics into account while training intending teachers for their work with preschoolers. This process is facilitated by *socio-cultural practices of an ethno-cultural orientation*. Personal experience acquired in various activities is aimed at adopting traditions, life experience, knowledge, habits, communication skills, at developing creative and intellectual abilities, at interactivity, openness, continuity between generations and at adopting the values of their own and other nations. Ethno-cultural educational practices also develop social skills, enrich social and intercultural experience and communication, and have a great influence on children's and adults' perception of the environment.

The ethno-cultural educational practice "National Holiday" can act as a monopactice. It can also be collective, combining such socio-cultural practices as "Folk games", "Folk toy" and many others. The ethno-cultural educational practice "National Holiday" is organized once a month at various social and socio-cultural events based on the native traditions and customs and traditions and customs of other nations and form "an annual circle of holidays". A national holiday or "folk festival" plays a social role, contributes to consolidating people of different age groups, positions, degrees of kinship. The teacher acts as a representative of the national culture and traditional values, and plays the key role in handing these traditions [16, 26].

The peculiarity of the national holiday lies in its multipolarity. It acquaints people with various folk traditions: national, family, labor, fes-

tive and gaming, and others. It allows the teacher to purposefully introduce children into the world of folk culture, ethics, and human relations without imposing it on them. Creating various children-adults co-existential communities organized on the common value bases will result in developing the atmosphere of co-experience, co-joy and co-creativity. In such communities children will gain practical skills, ethical norms and moral ideals. All these will help to keep national folk traditions and hand them to the younger generations. Intending teachers can gain experience in this field by participating in the process of working out and organizing this practice. In this way they develop their ability to carry out social interaction and realize their role in the team.

The ethno-cultural educational practice “National Holiday” develops over time and has certain stages, at each stage a part of its contents is formed. The structure of this practice is similar to the structure of the practices: 1. Preparation (festive event, place, time, attributes, interaction with parents (legal representatives); 2. Organization of the event; 3. Completion of the event, summing up.

Preparation implies choosing a festive event. Here are some examples: the cycle “Winter holidays” (Christian holiday “Christmas”, carols; New Year celebration by the Mari); the cycle “Spring holidays” (Christian holiday “Easter. Bright Easter Sunday”, a traditional holiday of the Mari “Peledysh Parem” - Flower Festival); the cycle “Summer holidays” (the holiday of Saints Peter and Fevronia - patrons of the family); the cycle “Autumn holidays” (folk Russian holidays “Autumn”, “Harvest Festival”, “Pokrov”; ritual holiday of the Mari people “New harvest!”) and others. The teacher has to independently study the idea of the holiday, to highlight its features in the traditional annual circle, to think of the scenario of the event, to pick up folklore and other materials (poems, songs, chants, languagerhymes, games, music pieces, etc.), to study literature and the experience of other educational institutions in this field.

The choice of a site for celebrating a national holiday depends on the number of participants, the day time and the season. N.V. Eremina writes that it can be an indoor or an outdoor playground, a music hall or a gym where there is a central site and some play spaces – small circles [17]. The central site is used for conducting group round dance games such as “And we sowed, sowed flax”, etc. Small circles are additional sites around the central site aimed at conducting various entertainments, for example, boys’ entertainments – gorodki (a game similar to skittles), weightlifting (lifting kettlebells), pillow fights, etc.; handicrafts

sites (folk crafts – vine weaving, wood carving, painting), dance floors, etc. The script of the event is worked out. Attributes for a folk festival are prepared in advance, it is important that there should be enough attributes for all the participants of the event (children, parents / legal representatives and children' relatives, colleagues, and other people interested in the event). If it is possible, a musician with folk instruments is invited in order to create a “live” sound.

The next stage is the immediate organization of the holiday. It implies creating the participants' emotional disposition to take part in socio-cultural activities including artistic creativity, and combining recreation, personal development and aesthetic education. These aims can be achieved by playing national melodies and tunes, watching video and slides, discussing video parables, decorating the central and the additional sites.

The stage of the event completion is aimed at uniting the participants, helping them to make friends. The organizers express their gratitude to everyone who was preparing, conducting the event and was participating in it. After the event it is necessary to summarize everything and analyze the event, work out a plan for the next event. Both children and adults can participate in this discussion.

The ethno-cultural educational practice “Folk Games” can be implemented as part of other practices, or as a separate one. Folk games include a lot of humor, jokes, and competitive enthusiasm; the movements are precise and imaginative, they are often accompanied by counting-out rhymes and nursery rhymes. Intending teachers learn these types of folklore at the university when studying the disciplines “Children's literature”, “Psychological and pedagogical workshop”, “Fundamentals of spiritual and moral education”, that is why they can easily join this practice [16, 26].

At the stage of creating conditions for folk games, the teacher thinks over the script of the game and actions rotations, prepares various riddles. Children learn poems, counting-out rhymes, parts of words for the game., etc. The teacher prepares various attributes (flags, bast shoes, scarves, ribbons, etc.), badges for the participants and emblems for the teams, organizes the playing sites indoors, in the gym, or out-of-doors, prepares a surprise moment on behalf of the fairy-tale character, writes a “secret message” in which the rules and regulations of the game are given. The participants of the game begin to have positive emotions, they are looking forward to something interesting. This practice and the

socio-cultural practice “National Holiday” can include the socio-cultural practice “National Toy”, which enriches the folk game, develops careful attitude and respect for the heritage of ancestors. Children get acquainted with folk traditions and rituals, learn the names and rules established in culture, enrich their active vocabulary.

The stage of organizing mutual game communication of the participants, that is “immersion” in the game, implies real communication of real game participants and imaginary communication of game characters in accordance with their roles. T.I. Babaeva, O.V. Solntseva think that this task is solved with the help of a number of pedagogical techniques which the intending teacher masters in interaction: establishing personal contact of the game participants; voluntary acceptance of the game roles by the children; establishing game rules compulsory for all the participants; ensuring authoritative refereeing, monitoring the implementation of the game rules; organizing communication “as a child” (the educator must emotionally identify himself/herself with the playing children) [18].

The immediate conducting of the game action is manifested in the performance of certain movements, actions (walking around, putting a handkerchief on someone’s shoulder) regulated by the rules of the game or the plot. The game, that is participation in socio-cultural practices of ethno-cultural orientation must result in a real victory, defeat, or victory of all participating teams (“friendship has won”), besides each participant is supposed to experience bright emotions caused by the game.

In our study we will describe the features of *socio-cultural practices of socio-pedagogical orientation* implemented in our experience of professional training of intending teachers for preschool educational institutions. There is no detailed description of this concept in the scientific literature yet. At the same time, we see that a wide experience in this field has developed in different regions of Russia and in other countries. Socio-cultural environment has a powerful socio-pedagogical potential. Socio-cultural environment, its factors taken in a complex help to develop social competence, contribute to social adaptation and social education based on the basic values, and introduce knowledge, habits, and skills into the practical field.

An interesting example of socio-cultural practices is the socio-cultural practice “Charity event”, based on the person’s voluntary activities,

their manifestation of social position by intending to do good, to help and support not only a specific category of beneficiaries, but also the society as a whole, this practice contains a bright and attractive idea. To implement the socio-cultural practice of socio-pedagogical orientation “Charity Event”, the teacher or the student must choose the category of beneficiaries (preschool children and their families in the “digital” era, orphans, children with disabilities, retired people, elderly disabled people in nursing homes, families in difficult life situations, and other categories) and the type of assistance (a master class, an information campaign, a charity concert, a concert aimed at drawing attention to the problem, etc.). Then the organizers determine the theme of the event, its format, the scale of the event (on a territorial basis), duration and time of the action, media support groups (social media), the announcement of the event, the sponsors of the event. It is advisable to attract and involve like-minded people from partner organizations, volunteers (university students, high school students, volunteers of resource volunteer centers, children’s parents, etc.) who will form a target group for conducting a charity event free of charge. It is important to ensure the preparation of a clear thought-out plan of the preparation, conducting the event, summing up the results and proving an efficient PR campaign throughout all the stages of the event. The themes and fields of charity events are very diverse: “Actions of good and useful deeds” (socially useful activities), “Be healthy!”, “Movement means life” (promotion of a healthy lifestyle), “Together!”, “Mobile Theater” (support of joint activities of healthy children and children with disabilities, joint activities of children, parents and teachers), etc. The events can also be timed to socially significant dates and holidays. After the event the organizers must tell all the participants about the results of the event. This practice makes it possible to carry out spiritual and moral education based on basic national values, promotes kindness, empathy, caring for one’s neighbors, develops the ability to identify current social problems and find solutions to them in the process of joint purposeful activities.

Due to the increased number of children with disabilities, and increased attention to solving their problems by various sectors of the state and society, it has become necessary for the society to introduce effective technologies and social practices when solving the problems of children’s socialization and integration, social adaptation, commu-

nication and self-realization. One of the solutions to the problems of inclusive education, integration into the society is the technology and socio-cultural practice “Inclusive Dance”. As defined by L.V. Tarasov, “inclusive dance is the joint dance creativity of people with and without disabilities” [19, 17]. Inclusive dance is intended not only for people in wheelchairs, but also for people with intellectual disabilities, with autism, with visual and hearing impairments, and deaf blind people. It is of particular importance for the disabled of groups I and II. The target group are people with various disabilities (musculoskeletal, intellectual, sensory), the age range of patients is from 3 years to the old age. This socio-cultural practice has a wide range of potentials. The joint dance of “special” people and healthy people combines art, communication, rehabilitation and volunteering. Examples of this kind of practice are the inclusive dance movement, the annual International Charity Dance Festival “Inclusive Dance” (the head of the organizing committee of this festival is L.V. Tarasov) and various events in this field in different regions of Russia held throughout the year. Intending preschool teachers studying at Mari State University have taken part in these events, were trained at the workshop on inclusive dance gaining new knowledge and interaction skills. Since 2020, due to the pandemic of Covid-19 and the lockdown, the Inclusive Dance festival has been held online via videoconference on the Zoom platform bringing together even more like-minded people from different countries than they used to.

When using the possibilities of artistic and aesthetic development (listening to music, making music, musical and rhythmic movements), the teacher allows disabled children to “live” their emotions, mood, sensations through dance. I.G. Galyant considers that the teacher does it with the help of images, imagination, fairy tales and fantasy [20, 112]. The theoretical knowledge, skills and abilities obtained in the course “Methods of musical education of preschool children” gives the intending teacher of preschool educational institutions the opportunity to take an active part in working with children with disabilities. Such children need more time to master the techniques of movement. The teacher creates conditions for the children to feel joy, to express emotional and motor reactions, to perceive music by the whole body, to move spontaneously and to improvise, to express their feelings through gesture, facial expressions. Performing dances of different nations children get

acquainted with folk culture, develop the ability to see characteristic movements of different national dances. Building an inclusive society and providing education for everyone is an important step in the development of each individual and the state as a whole.

N.N. Chaldyshkina and S.V. Korableva consider that the socio-cultural practice “Educational Web Quest” is developing thanks to information and communication technologies [21, 97]. This practice has been developing especially actively since 2020 during the pandemic Covid-19. We regard this practice as a unique opportunity for a post-cortical space. In our experience, for example, it is aimed at clarifying and acquiring knowledge about religious and cultural heritage both by intending teachers and by beneficiaries from the group of disabled citizens, at developing interest and respect for the national religious and cultural heritage (Certificate of state registration of the computer program No 2018611276 “Educational web-quest “Orthodox routes for the youth of the Republic of Mari El” given by the Federal Service for Intellectual Property, dated 29.01.2018, the authors are N.N. Chaldyshkina, S.V. Korableva, S.B. Askalonova, A.D. Mamatova) [22]. A virtual journey combining the technology of virtual and mixed reality (VR/ AR) can turn into a real journey, an excursion, a pilgrimage trip along the pre-selected routes at the next stage.

Socio-cultural activities is a special way of the students expressing their attitude to the development of the system of professional knowledge and the ways of implementing them. According to N.G. Komratova, it synthesizes cognitive, emotional and volitional development of the personality, providing spiritual and practical development of the educational environment [23].

While working on the research we conducted an express survey of students “The ability to implement socio-cultural practices”. 41 undergraduate students took part in the survey. Each ability was to be evaluated according to the scale from 1 to 10, where “1” means that the ability is not developed, “10” means that the ability is completely developed. The quantitative data of the survey are given in Table 2.

| | | | | | | | | | | |
|-----------------------|--|-----|------------------|------------------|-------------------|-------------------|--------------------|--------------------|-------------------|--------------------|
| Competence | TEAMWORK AND LEADERSHIP | | | | | | | | | |
| Indicator | Ability to carry out social interaction and realize one's role in the team | | | | | | | | | |
| Points | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Number of people, (%) | 0 % | 0 % | 0 % | 1 person (2,4 %) | 5 people (12,2 %) | 4 people (9,8 %) | 7 people (17,1 %) | 9 people (22 %) | 6 people (14,6 %) | 9 people (22 %) |
| Competence | INTERCULTURAL INTERACTION | | | | | | | | | |
| Indicator | Ability to perceive intercultural diversity of the society in socio-historical, ethical and philosophical contexts | | | | | | | | | |
| Points | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Number of people, (%) | 0 % | 0 % | 0 % | 2 people (4,9 %) | 1 people (2,4 %) | 6 people (14,6 %) | 8 people (19,5 %) | 6 people (14,6 %) | 5 people (12,2 %) | 13 people (31,7 %) |
| Competence | STUDENTS' JOINT AND INDIVIDUAL EDUCATIONAL ACTIVITIES | | | | | | | | | |
| Indicator | Ability to organize joint and individual educational activities of students, including those with special educational needs, in accordance with the State Educational Standard | | | | | | | | | |
| Points | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Number of people, (%) | 0 % | 0 % | 1 person (2,4 %) | 0 % | 3 people (7,3 %) | 3 people (7,3 %) | 10 people (24,4 %) | 12 people (29,3 %) | 5 people (12,2 %) | 7 people (17,1 %) |
| Competence | DEVELOPMENT OF EDUCATIONAL TEACHING ENVIRONMENT | | | | | | | | | |
| Indicator | Ability to carry out spiritual and moral education of students on the basis of the core national values | | | | | | | | | |
| Points | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Number of people, (%) | 0 % | 0 % | 0 % | 1 person (2,4 %) | 3 people (7,3 %) | 3 people (7,3 %) | 8 people (19,5 %) | 10 people (24,4 %) | 6 people (14,6 %) | 10 people (24,4 %) |

Tab. 2 Results of the survey "The ability to implement socio-cultural practices"

While analyzing the results of the survey on the competence “Teamwork and leadership” (the indicator “The ability to carry out social interaction and realize one’s role in the team”), it was found out that the highest point on the scale (10) was selected by 22% of the respondents who determined that the ability was completely developed. The same number of people rated this ability by 8 points (22%). The respondents also assessed the competence “Teamwork and leadership” developed during the professional training of intending teachers by 9 points (14,6%), 7 points (17,1%), 6 points (9,8%), 5 points (12,2%) and 4 points (2,4%). However, it should be mentioned that none of the respondents chose the points “1”, “2” and “3” indicating that the ability is not developed or is developed at a very low level. As it can be seen, the survey participants determine the development of their ability to carry out social interaction and realize their role in the team above average and close to high.

The next step was analyzing the results of the survey on the competence “Intercultural interaction” (the indicator “Ability to perceive intercultural diversity of the society in socio-historical, ethical and philosophical contexts”). 31,7% of the survey participants evaluated the development of this ability by 10 points. The formation of the ability for 9 points was pointed out by 12,2% of the people, 8 points by 14,6%, 7 points by 19,5%, 6 points by 14,6% respectively. Thus, the majority of the respondents noted the above-average development of this ability. We attribute it to the following fact. While getting professional training at the university students have various socio-cultural practices that effectively influence the development of this ability. Among the respondents there was nobody who chose the points “1”, “2” and “3 indicating that the ability is not developed or is developed at a very low level.

After studying the respondents’ answers on the competence “Students’ joint and individual educational activities” (the indicator “Ability to organize joint and individual educational activities of students, including those with special educational needs, in accordance with the State Educational Standard “), it was determined that the predominant number of choices among the respondents was for 8 points on the scale (29,3%). The second place was taken by the choice of 7 points (24,4%). 17,1% of the respondents rated this professionally important and highly demanded ability in modern preschool education by 10 points. One respondent (2,4%) assessed this ability as developed at a low level (3 points). Among the respondents there were no people who chose the points “1”, “2” and “4” indicating that the ability is not developed, is de-

veloped at a very low level or at the level close to the average. The rest of the respondents assessed the formation of this ability at the average level and above the average level.

The survey results on the competence “Development of educational teaching environment” (the indicator “Ability to carry out spiritual and moral education of students on the basis of the core national values “) were also studied. The highest score on the scale (10) was selected by 24,4% of the respondents who determined that the ability is completely developed. The same number of the respondents chose 8 points (24,4%) that is close to a high level of its development. As it can be seen from the table, the majority of the respondents have noted the above-average level of development of this ability. None of the respondents chose the points “1”, “2” and “3” indicating that the ability is not developed or is developed at a very low level. The data given in the table show that the survey participants determine the development of this essential and significant ability, the ability to carry out spiritual and moral education of students on the basis of the core national values, at the level above average and close to the high level.

Thus, the professional training of intending teachers involves both theoretical training and participation in socio-cultural practices of ethno-cultural and socio-pedagogical orientation. It develops their ideas of the future professional activities, the intercultural diversity of modern society, contributes understanding the holistic educational process.

References

1. Federal Law “On Education in the Russian Federation” [Internet] [cited 22.02.2022]. Available from: http://www.consultant.ru/document/cons_doc_LAW_140174/
2. Professional standard “Teacher (educational activities in the field of preschool, primary school, and secondary school education) (educator, teacher)” [Internet] [cited 24.02.2022]. Available from: https://profstandart.rosmintrud.ru/obshchiy-informatsionnyy-blok/natsionalnyy-reestr-professionalnykh-standartov/reestr-professionalnykh-standartov/?ELEMENT_ID=56367
3. Federal state educational standard of higher education in the field of training 44.03.02 “Psychological and pedagogical education” (bachelor’s degree program “Psychology and pedagogy of preschool education”) [Internet] [cited 22.02.2022]. Available from: https://fgosvo.ru/uploadfiles/FGOS%20VO%203++/Bak/440302_B_3_20032018.pdf
4. Federal State Educational Standard of Preschool Education [Internet] [cited 31.01.2022]. Available from: <https://docs.cntd.ru/document/499057887>

5. Kaminskaya ND, Ertman EV, Kavera VA. Features of socio-cultural practices in the conditions of the university. *Bulletin of the Pushkin State University*. 2018;4:279-288 [cited 24.03.2022]. Available from: <https://cyberleninka.ru/article/n/osobennosti-sotsiokulturnyh-praktik-v-usloviyah-vuza>
6. Bourdieu P. Practical sense. Translated from French. In: Bikbov AT, Voznesenskaya KD, Zenkin SN, Shmatko NA, editors. St. Petersburg: Al-eteya; 2001. 562 p.
7. Zapesotsky A.. Education: philosophy, cultural studies, politics; Russian Academy of Sciences. Institute of philosophy. Moscow: Nauka; 2003. 454 p.
8. Nikolina VV. Socio-cultural practice as a vector of development of modern educational space. *Scientific dialogue*. 2017;2:269-280.
9. Kholostova EI, editor. *Russian Encyclopedia of social worker*. M, 2016. 1032 p. Available from: <https://soc-education.ru/wp-content/uploads/2017/07/RESR-2016.pdf>
10. Goreyev AM. Socio-cultural practice as a tool for improving students cultural level // Scientific result. *Pedagogy and psychology of education*. 2021;3:25-39. Available from: <https://cyberleninka.ru/article/n/sotsiokulturnaya-praktika-kak-instrument-povysheniya-kulturnogo-urovnya-studentov>
11. Zaboeva MA. Realization of the educational potential of the game in the conditions of modern preschool education. *Bulletin of the Shadrinsky State Pedagogical University*. 2020;4(48):45-47. Available from: <https://cyberleninka.ru/article/n/realizatsiya-vospitatelno-obrazovatelno-potentsiala-igry-v-usloviyah-sovremennogo-doshkolnogo-obrazovaniya>
12. Bolshakov VP. Cultural practices in the processes of culture development // *Bulletin of SPbGIK*. 2016;2(27):16-22. Available from: <https://cyberleninka.ru/article/n/kulturnye-praktiki-v-protssah-stanovleniya-kultury>
13. Sosunova NYu, Shurilova TV. Cultural practices as a requirement of implementing federal state educational standards. *The world of science, culture, education*. 2016;1(56):179-182. Available from: <https://cyberleninka.ru/article/n/kulturnye-praktiki-kak-uslovia-realizatsii-federalnyh-gosudarstvennyh-obrazovatelnyh-standartov>
14. Fedorova SN., Kornilova NA. Ethnocultural educational practices as a means of familiarizing children of the middle group with the culture of their people: Monograph. Yoshkar-Ola: MarS;, 2018. 104 p.
15. Acosta A. Ethnocultural identity of a child: socio-psychological characteristics // *Socio-economic phenomena and processes*. 2011;10:337-341. Available from: <https://cyberleninka.ru/article/n/etnokulturnaya-identichnost-rebenka-sotsialno-psihologicheskaya-harakteristika>
16. Fedorova SN, Kornilova NA. Ethnocultural educational practices as a means of familiarizing children of the middle group with the culture of their people: Monograph. Yoshkar-Ola: MarSU; 2018. 104 p.
17. Eremina NV. Traditional folk holidays in the system of additional education: organization, methodology, practical material. Kaliningrad: Kaliningrad Re-

- gional Institute of Education Development, 2018. 94 p. Available from: <https://www.koiro.edu.ru/activities/nauchno-metodicheskaya-deyatelnost/redaktsionno-izdatelskaya-deyatelnost/spisok-literaturny-izdannoy-oiro/2018/narodnyeprazdniki.pdf>
18. Babaeva TI, Solntseva OV. Designing cultural practices of preschoolers in the educational process of kindergarten. *Kindergarten: theory and practice*. 2015;5:38-47.
 19. Tarasov LV. Art, rehabilitation, volunteering are the three whales of inclusive dance. *Attraction: collection of the best Russian practices of socio-cultural rehabilitation of disabled people*, Comp. LV Tarasov, EI Zotova. M.; 2018. 182 p.
 20. Galyant IG. Artistic and aesthetic development in solving the problems of inclusive preschool education. *Scientific and methodological support for assessing the quality of education*. 2018;2(5):109-113. Available from: <https://cyberleninka.ru/article/n/hudozhestvenno-esteticheskoe-razvitiye-v-reshenii-problem-inklyuzivnogo-doshkolnogo-obrazovaniya>
 21. Chaldyshkina NN, Korableva SV. Conditions of spiritual and moral education and development of student youth (on the example of the implementation of the grant project "With good Orthodox paths!"). *Bulletin of the Mari State University*. 2018;12(4):80-86.
 22. Chaldyshkina NN, Korableva SV, Mamatova AD, Askalonova SB. "Orthodox routes for the youth of the Republic of Mari El" (Educational web-quest): Certificate of state registration No. 2018 611276, issued by the Federal Service for Intellectual Property (Moscow) 29.01.2018.
 23. Komratova NG. Prospects of training specialists in socio-cultural education of children. *Bulletin of VyatSU*. 2009;2:71-75. Available from: <https://cyberleninka.ru/article/n/perspektivy-podgotovki-spetsialistov-po-sotsiokulturnomu-vozpitaniju-detey>



PSYCHOLOGICAL READINESS FOR MATERNITY OF GIRLS LEFT WITHOUT PARENTAL CARE

Rezida Khusnutdinova, Julia Anisimova, Elena Konovalova

Abstract. The article reveals the concept of “psychological readiness for maternity”, defines the components of psychological readiness - the need-motivational block, the cognitive block and the block of social and personal readiness. It is indicated that the degree of formation of psychological readiness for maternity has a significant impact on the maternal behavior of girls in the future. Diagnostic tools for studying the components of readiness for maternity are highlighted. The following methods were applied: a modified version of the questionnaire by S.Y. Meshcheryakova and N.N. Avdeeva, the test “Identification of the relationship of boys and girls to the family” by T. Schreiber, the test “Moral readiness for marriage” (A.N. Sizanova, V.A. Sysenko, B.Y. Shapiro), the drawing projective test “My baby”. The results of an empirical study of the psychological readiness for maternity of young girls who were brought up outside the family at the ascertaining and control stages of the experiment are presented.

The obtained results demonstrated that the pupils have the highest indicators for the cognitive block according to the components that make up the psychological readiness for maternity. Girls have a fairly high level of knowledge about the peculiarities of intrauterine development, birth and upbringing of children. However, the results for the block of social and personal readiness have been reduced. Girls do not realize the responsibility of maternity and at the same time do not know what difficulties a girl may face at the birth of a child. These results allow us to conclude that girls left without parental care need additional information in the field of maternity. The paper presents a series of classes to increase the degree of psychological readiness for maternity.

Keywords: psychological readiness for maternity, orphanage, young girls, pregnancy, family, child.

Introduction

The problem of young mothers - graduates of orphanages has been acute for a long time. The vast majority of such mothers do not have psychological readiness for maternity, do not have the knowledge and skills to care for a child, they have poorly developed household skills. At the same time, sometimes girls leave newborns immediately, but more often - after a year and a half. It is difficult for graduates who are not on their feet, who do not have earnings, education, who do not know how to build a life, to cope with the role of a mother. It is necessary to prepare

future graduates for the role of a parent in advance, achieving a meaningful, adequate idea of maternity [1].

Pregnancy in adolescent girls (13-17 years old) from a psychological point of view has a destructive effect on the development of the emotional-volitional sphere, value-semantic orientations, the formation of sexual and maternal behavior. But, unfortunately, to this day there is an acute problem of early pregnancy and abortion in teenage girls. Our society needs to prepare girls for maternity, including psychological preparation. It is especially difficult to inform and convey the importance and responsibility of this step to girls left without parental care. Therefore, we have carefully developed and proposed a set of classes with training elements to increase the level of psychological readiness for maternity of girls left without parental care [2; 3].

The degree of formation of psychological readiness for maternity has a significant impact on the maternal behavior of girls in the future. That is why in our work we examined in detail the concept of psychological readiness for maternity and found out that this concept includes three blocks of readiness: a need-motivational block, a cognitive block and a block of social and personal readiness for maternity.

Therefore, the question of the leading factors that ensure psychological readiness for maternity remains open. It became the subject of this study.

Materials and Methods

The purpose of the study consisted in studying the degree of psychological readiness for maternity of girls left without parental care.

The object of the study is the process of increasing the degree of psychological readiness for maternity of girls left without parental care at the age of 15-17 years.

The subject of the study is the characteristics of need-motivational, cognitive and social and personal readiness for maternity, which constitute psychological readiness for maternity.

The following assumptions are put forward as the hypothesis of the study:

- the cognitive component of psychological readiness for maternity among girls left without parental care is higher than the social and personal and need-motivational components.

Methods and methods of research: theoretical analysis and synthesis of psychological and pedagogical literature, comparison, generalization, methods of collecting empirical information: questionnaires, conversa-

tions, studying the products of children's activities, the test "Moral readiness for marriage", the test "Identification of the relationship of boys and girls to the family"; elements of training sessions to increase the degree of psychological readiness for maternity, the method of mathematical statistics - Student's t-criterion were used in the work.

Methodological basis the works were the works of such authors as Sh.A. Amonashvili, V.A. Slastenin, who adhere to a personality-oriented and activity-oriented approach to education; A. Nekrasov, O.A. Andaralo, N.L. Malenkova, who emphasize the importance of the problem of family education of children; L.Ya. Oliferenko, T.I. Shulgi, V.V. Komarov, who write about the protection of childhood and socio-pedagogical support for children and adolescents, etc. [4; 5].

Practical significance: the study of this work will reveal the degree of psychological readiness for maternity of girls left without parental care. The introduction of the classes described in the work into the work of teachers-psychologists of orphanages will increase the effectiveness of preparing girls left without parental care for maternity.

Research base: orphanage №74 "Merhemet" of the city of Naberezhnye Chelny of the Republic of Tatarstan.

Thus, initially we got acquainted with the different views of the authors on the concept of "psychological readiness for maternity". All of them emphasize the importance of preparing the girl psychologically for this responsible step. In our work, we will rely on the view of E.V. Matveeva, who defines psychological readiness for maternity as a specific personal education, which includes three blocks of readiness: a need-motivational block; a cognitive-operational block and a block of social and personal readiness for maternity [6].

Thus, during the theoretical analysis, we have made the following conclusions:

1. Scientists do not give an unambiguous definition of the concept of "maternity". We have considered various variants of this definition.

2. Most authors who study the problem of readiness for maternity believe that readiness for maternity is formed throughout life.

3. During the analysis, we noticed that the concept of "psychological readiness for maternity" consists of three components: need-motivational, cognitive and social and personal .

4. We can say that the psychological readiness for maternity of girls living in an orphanage is one of the educational tasks of the educational process, the goal of which is the orientation of adolescents to becoming

themselves as individuals in the conditions of marital and family relations.

Results and discussions

The study was conducted on the basis of the orphanage №74 “Merhemet” of the city of Naberezhnye Chelny of the Republic of Tatarstan. In total, 24 pupils of the orphanage aged 15 to 17 years took part in it.

The study was conducted in three stages. At the ascertaining stage, the purpose of which was to study the psychological readiness for maternity of pupils, the following methods were used: a modified version of the questionnaire by S.Y. Meshcheryakova and N.N. Avdeeva, the test “Identification of the relationship of boys and girls to the family” by T. Schreiber, the test “Moral readiness for marriage” (A.N. Sizanova, V.A. Sysenko, B.Y. Shapiro), the drawing projective test “My Baby”. This technique is a drawing technique - a modification of the projective techniques of “Drawing my family” (L. Korman, R. Burns, S. Kaufman, A.I. Zakharov, V.V. Stolina).

At the formative stage of the experiment, the purpose of which was the formation of psychological readiness for maternity, a set of classes with training elements was developed aimed at increasing the degree of psychological readiness for maternity of girls left without parental care.

At the control stage of the experiment, the purpose of which was to identify the dynamics of the degree of psychological readiness for maternity before and after the complex of classes with training elements, secondary diagnostics was carried out, the results of the study were processed and the dynamics of the development of knowledge about the family and psychological readiness for maternity were analyzed.

At the first stage, to study the formation of the girls of the orphanage №74 “Merhemet” of general ideas about the family and to identify the level of their psychological readiness for maternity, a modified version of the questionnaire of Meshcheryakova S.Yu. and Avdeeva N.N. was used. The questionnaire allows you to identify the degree of value of the child for the expectant mother, the type of maternal attitude to the child, the level of knowledge of girls about the upbringing, development of children.

To achieve the objectives of the study, the test “*Identification of the relationship of boys and girls to the family*” by T. Schreiber was used. This technique is designed to diagnose the relationship of boys and girls to the family.

Another research method that was used in the course of the study is *the drawing projective test "My Baby"* (L. Korman, R. Burns, S. Kaufman, A.I. Zakharov, V.V. Stolin). The technique was used by us to study emotional readiness for maternity, since it reflects the experience and perception of a child by women and girls and their attitude towards him. In the course of the study, we also used the method "*Moral readiness for marriage*" (Sizanov A.N., Sysenko V.A., Shapiro B.Yu.), which allows us to find out the level of readiness for family life of pupils [7; 8; 9].

At the second stage, we conducted a set of classes with training elements. The purpose of these classes is to promote the competence of girls living in an orphanage in the field of family and maternity through active teaching methods (cognitive games, educational discussions, etc.) [10; 11]. We conducted the following thematic classes:

Lesson №1. "*How to communicate?*". Purpose: to familiarize the children of the orphanage with the basic rules of communication, to develop certain communicative abilities in them. The lesson was held in the form of a game, with training exercises and games for emancipation, empathic communication, tasks were also carried out on the ability to listen, work in a group and individually.

Lesson №2. "Family". Purpose: to familiarize children with the history of the origin and development of the family, the stages of development of relations between a man and a woman. Find out their points of view regarding this concept and correct them with the help of discussions if necessary. We introduced the children to the history of family development. They emphasized that the most important value in life is the family. We conducted the "Tree of possible Self" technique. There was also a visualization of how they imagine love. During the event, children took an active part. They listened attentively and asked questions. They performed exercises with interest and watched compositions.

Lesson №3. "Female attractiveness". Purpose: to familiarize girls with the basic rules of behavior in society, applying makeup, choosing clothes and other aspects of etiquette that a girl should adhere to. This topic is very important for the children of the orphanage, as there are problems in understanding the true female beauty and its manifestation among the youth of adolescence.

Lesson №4. "Conscious parenting". Purpose: To discuss with the pupils the harm of smoking, alcohol, early pregnancy, abortion. To say the importance of approaching parenthood consciously

Lesson №5. "Early pregnancy". Purpose: To discuss the negative aspects of early pregnancy and its impact on the girl's body. We discussed

the age that is considered early for pregnancy, the peculiarities of the development of the body of a girl aged 13 to 17 years, discussed the negative consequences of early pregnancy for both the baby and the young mother, discussed the danger of childbirth at this age.

Lesson №6. “Contraception”. Purpose: To familiarize girls with the main methods of contraception in order to prevent their early unwanted pregnancy and STD prevention.

Lesson №7. “Pregnancy”. Purpose: To introduce girls to the stages of pregnancy, to form their knowledge about the development of a child in the womb.

Lesson №8. “Childbirth”. Purpose: To familiarize girls with the stages of childbirth.

Lesson №9. “Baby.” Purpose: To form a positive attitude towards the child in girls, to familiarize them with the basic rules of interaction with the child in the first years of his life. During the lesson, we discussed how to treat a child in the first years of his life, how to communicate with him correctly. Presentations were used.

Lesson №10. “I am an expectant mother. Conscious maternity”. Goal: To form a conscious view of maternity in girls, to talk about the responsibility and seriousness of this step.

During the complex of classes with elements of training, they tried to give as much knowledge as possible to girls about family, maternity, pregnancy, childbirth. We tried to form an emotionally positive and respectful attitude towards the child.

Thus, the results obtained indicate that not all subjects are aware of the responsibility that appears in a woman who has decided to give birth to a baby. Note that 95.8% of respondents do not know exactly what difficulties arise with the birth of a child. 4.16% of respondents indicate the occurrence of financial difficulties only. Analyzing the attitudes of respondents to the parenting strategy, we note the following: 83.3% of respondents believe that parents play an important role in the upbringing of a child. The rest (16.6%) believe that their presence is not necessary. 87.5% of respondents emphasize the importance of having a child in a full family, 12.5% refrained from answering this question. 58.3% of respondents realize that parents are to blame for the fact that the child does not obey. Among the goals and principles of raising children, girls distinguish: taking care of the child, upbringing, sending the child to kindergarten, putting him on his feet, etc. (Fig.1).

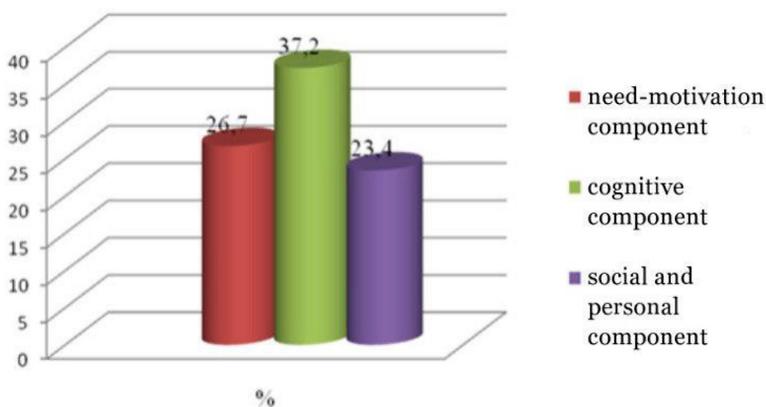


Fig. 1 Indicators of psychological readiness for maternity of girls left without parental care

Based on the results of the survey, we made the following conclusions. Speaking about the first, the need-motivational component (the level of emotional need for children and the value of children and maternity in general), it should be noted that the child is not considered by most girls as a great value that brings joy and happiness. However, they all want to have a child. Also, the majority of respondents have no idea about the meaning of maternity. Almost everyone has no emotionally positive attitude to pregnancy and there is a fear of childbirth. Considering the results of the second block - the cognitive component (the level of knowledge of girls about the peculiarities of intrauterine development, development and upbringing of children), we can say that girls have practically no idea about the functions of the mother. Also, in the whole block, we see insufficient knowledge about the peculiarities of the development and upbringing of children, although most girls note that it is necessary to get acquainted with such information before the birth of a child. The results of the third block (social and personal readiness for maternity) indicate that girls are aware of the responsibility of maternity. But at the same time they do not know what difficulties a girl may face at the birth of a child. All these results allow us to conclude that girls left without parental care need additional information in the field of maternity.

After analyzing the results of the test “Moral readiness for marriage” (Sizanov A.N., Sysenko V.A., Shapiro B.Yu), we obtained the following

indicators. The indicator of girls with a low level of moral readiness for marriage (rejection of family as a value, a normal attitude to early sexual life and the change of several partners, lack of empathy for the prospective future spouse, inability to resolve conflicts peacefully, etc.) was 29.16%. With an average level of 45.83%. The highest level of moral readiness for marriage (understanding that early sexual life entails many problems, willingness to empathize with the feelings of another, acceptance of family as values, etc.) was revealed in 25% of girls (Fig.2).

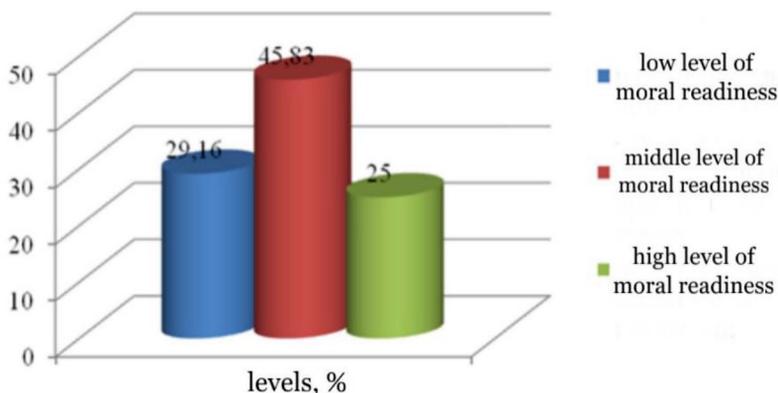


Fig. 2 The level of moral readiness for marriage of girls left without parental care (before the complex of classes with training elements)

Based on the results of this test, we also concluded that it is necessary to conduct a set of classes with training elements aimed at forming girls' knowledge about maternity, family, pregnancy, childbirth, and the formation of correct communication and interaction skills.

We also summed up the results of the test "Identification of the relationship of boys and girls to the family" by T. Schreiber. According to the requirements of this test, the object of close attention should be children, the coefficient of the ratio to the family, which was less than 40%. After analyzing the test results, we concluded that 66.6% of children have a low ratio to the family, i.e. children have broken ideas about the family, about life in it.

These results emphasize the need for correctional and preventive classes with the study participants.

Next, we developed and implemented a set of classes with training elements. The purpose of these classes is to promote the competence

of girls, living in an orphanage, in the field of family and maternity with the help of active teaching methods (cognitive games, educational discussions, etc.). We conducted the following thematic classes: "How to communicate?", "Responsible parenthood", "Family", "Female attractiveness", "Early pregnancy", "Contraception", "Pregnancy", "Childbirth", "Baby", "I will be a mother. Conscious maternity".

At the third stage of the research, we conducted a secondary diagnosis to determine the effectiveness of the classes.

During the analysis of the results obtained on the questionnaire of Meshcheryakova S.Yu. and Avdeeva N.N., the following conclusions were made. Among the primary tasks, the majority of respondents (75%) point to family, maternity and the birth of a child. As for the estimated number of children, 91.6% of respondents want to have two or three children. All respondents answered that the birth of a baby is for them a happy, big, most important, good event in life. In the task where it was required to continue the phrase "Children are ..." 83.3% of respondents answered that children are happiness, joy, miracle. 16.6% of respondents answered that "children are little people."

Similar level can be traced in relation to the need-emotional readiness of respondents for maternity. Analyzing their attitude to pregnancy and childbirth after conducting classes with training elements, it was found that at the sight of pregnant women, girls had only positive emotions. These answers show that the girls have an emotionally positive attitude to pregnancy as the beginning of maternity. Speaking about childbirth, the girls, after they found out exactly how this process goes, how to prepare for it and what the girl and the child feel at the same time, replied that if they behave correctly during childbirth, prepare for them morally in advance, then there is nothing to be afraid of. The main thing is to think about the child and listen to the doctors. That is, we can say that we have removed the gap in their knowledge about this process, which by itself has reduced the fear of the unknown.

How well was the positive image of the child formed? All respondents noted that they began to look at children differently and children cause them tenderness and joy. In addition, the girls realized that the birth of a child would somehow change their lives. The respondents had a desire to take care of the child, to help the younger children of the orphanage.

Thus, the results obtained indicate that the subjects are aware of the responsibility that appears in a woman who has decided to give birth to a baby.

Analyzing the respondents' attitudes to the parenting strategy, we note the following. All respondents believe that parents play an important role in the upbringing of a child. 79.16% of respondents emphasize the importance of having a child in a full family. The girls note that the model of a full family is ideal for them. 83.3% of respondents realize that the fact that the child does not obey may be the fault of the parents. (Fig. 3).

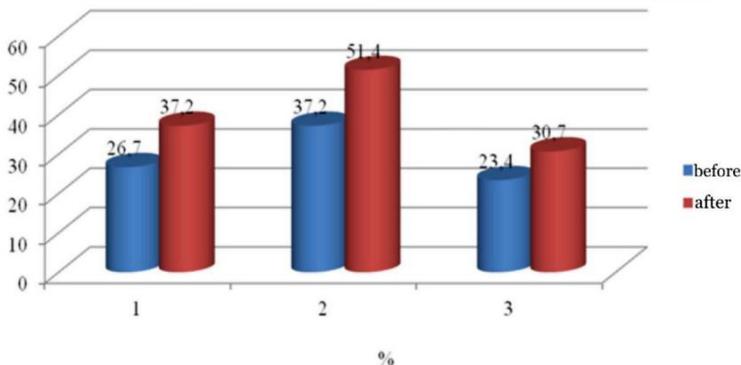


Fig.3 Dynamics of indicators of psychological readiness for maternity of girls left without parental care after repeated diagnosis

1-need-motivation component

2-cognitive component

3-social and personal component

In general, the respondents' level of psychological readiness for maternity has increased significantly, especially in the cognitive block.

Which is confirmed by the method of mathematical statistics of the Student's t-test. After looking at the result obtained by us according to the table "Critical values of the Student's t -test for a given number of degrees of freedom and probabilities of permissible errors equal to 0.05, we concluded that the differences are significant, the indicators are reliable ($t=2.46$; $p \geq 0.05$).

Next, we analyzed the results of the repeated drawing test "My Baby" (L. Korman, R. Burns, S. Kaufman, A.I. Zakharov, V.V. Stolin), which were obtained after conducting classes with training elements.

The girls have a good emotional attitude to the child, there is a drawing of body details, decoration, the use of various colors. Most of the girls

drew the child as a complete figure with the attributes of a baby, which also indicates a good positive emotional attitude towards the child. 50% of respondents drew a large baby figure, which emphasizes the importance of the child for them. Skipping body parts is not observed in any drawing, children are drawn smiling.

Therefore, we can conclude that the emotional attitude of girls left without parental care to the child has changed for the better.

After the repeated test “Moral readiness for marriage” (Sizanov A.N., Sysenko V.A., Shapiro B.Yu), the indicator of girls with a low level of moral readiness for marriage was 19.6%. With an average level of 48.83%. The highest level of moral readiness for marriage was already revealed in 31.56% of girls. (Fig. 4). This also confirms the effectiveness of our classes.

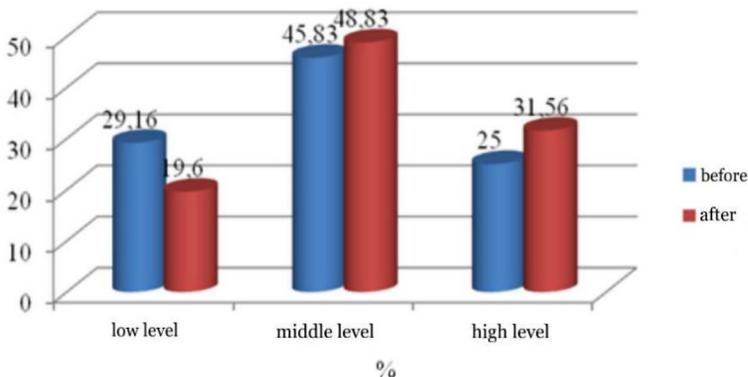


Fig.4 Comparative diagram showing the levels of moral readiness of girls for marriage before and after classes with training elements

As we can see, the level of moral readiness for marriage of girls left without parental care has increased.

We also conducted a re-diagnosis on the test “Identification of the relationship of boys and girls to the family” by T. Schreiber. And we made the following conclusions: if before the complex of classes with training elements, girls with a low ratio to the family were 66.6%, then after we conducted a complex of classes with training elements, they amounted to 48.6%. The results show that girls with a low indicator of the level of attitude to the family decreased.

Based on the obtained results, it can also be concluded that girls have begun to realize the importance of a child in a woman's life. After all, now the child is considered by them as an independent value. Among the functions of a girl's mother, they distinguish love for a child, raising a child, accepting a child as he is, caring for him, providing everything necessary. We also removed the gap in their knowledge about pregnancy, childbirth and baby care. It is obvious that the girls' fear of childbirth has decreased somewhat. The most important thing is that girls are fully aware of the great responsibility that appears in a woman who has decided to give birth to a baby.

Summing up the results of our research, we made the following conclusions:

1. According to the method "Moral readiness for marriage" (Sizanov A.N., Sysenko V.A., Shapiro B.Yu.), the dynamics of an average and high level of moral readiness for marriage of girls left without parental care is observed. If before the complex of classes with training elements, the results were: average level - 45.83%, high level - 25%. Then after the classes we got the following result: the average level is 48.83%, the high level is 31.56%.

2. According to the method of "Identifying the relationship of boys and girls to the family" by T. Schreiber, it is clear that the indicator of a low level of attitude to the family of girls left without parental care has decreased. If before the complex of classes with training elements, the low-level indicator was 66.6%, then after the classes it decreased and amounted to 48.6%.

3. An analysis of the drawings of girls using the projective technique "My Baby" (L. Korman, R. Burns, S. Kaufman, A.I. Zakharov, V.V. Stolin) before and after classes with training elements allows us to conclude that the emotional attitude of girls left without parental care to the child has changed for the better.

4. According to the modified questionnaire of Meshcheryakova S.Yu. and Avdeeva N.N., we traced the dynamics of indicators for three components that make up psychological readiness for maternity.

5. The results obtained in the course of the study indicate the effectiveness of the conducted classes with training elements. The girls have significantly increased the indicators of knowledge about family, maternity and child. Among the primary tasks, most of the girls began to point to family, maternity and the birth of a child.

Conclusion

As a result of theoretical and empirical study of the problems of maternity of girls left without parental care, the following conclusions were obtained:

1. When analyzing the concept of “Psychological readiness for maternity”, attention was drawn to the fact that it consists of three components: need-motivational, cognitive and social and personal .

2. The hypothesis that the effectiveness of improving the competence in the field of maternity of girls brought up in an orphanage can be provided through a set of classes with training elements aimed at forming ideas about the family and increasing psychological readiness for maternity has been confirmed in the course of our research.

3. The results obtained by us on the questionnaire of Meshcheryakova and Avdeeva showed that the pupils have the highest indicators for the cognitive component in terms of the components that make up psychological readiness for maternity. The result is confirmed by mathematical statistics.

4. With the help of the selected diagnostic tools, we studied the level of psychological readiness for maternity of the girls of the orphanage №74 “Merhemet”. We have studied their attitude to the role of the mother, to the child, to the family as a whole. After conducting a comparative analysis of the degree of psychological readiness for maternity before and after conducting a set of classes with training elements, we can say that we have managed to increase the level of psychological readiness for maternity of girls left without parental care.

References

1. Mineeva OA, Leaders AG. Familistics. Review of scientific ideas about the family. *Social psychologist*. 2011;1(21):19-58.
2. Pavlova TV. Psychological determinants of the formation of personal ideas about parenthood: abstract. diss. ... cand. psychological sciences. Moscow: Peoples' Friendship University of Russia; 2012. 21 p.
3. Nevstrueva TH, Con LL. Ideas about motherhood of girls – social orphans in the context of the problem of psychological readiness for motherhood. *World of Science. Pedagogy and psychology*. 2019;4(7):13p. Available at: <https://mir-nauki.com/PDF/65PSMN419.pdf>
4. Behringer J, Reiner I, Spangler G. Maternal representations of past and current attachment relationships, and emotional experience across the transition to motherhood: A longitudinal study. *Journal of Family Psychology*. 2011; 25(2): 210–219.

5. Fraser JS, Solovey AG. Integrative families and systems treatment: a middle path toward integrating common and specific factors in evidence-based family therapy. *Journal of marital and family therapy*. 2012;38(3):515-28.
6. Matveeva EV. Analysis of maternity from the perspective of activity theory. Kirov: Vyatka State Humanities University; 2004. 250 p.
7. Vasyagina HH. Diagnostics and correction of mother's self-consciousness. Yekaterinburg: Ural State Pedagogical University; 2010. 168p.
8. Parishioners AM. The work of a psychologist in residential institutions for children left without parental care: The workbook of a school psychologist. Moscow: Enlightenment; 1991. 374 p.
9. Vasyagina HH. Mother as a subject of socio-cultural space: monograph. Yekaterinburg: Ural State Pedagogical University; 2010. 340 p.
10. Mironova SI., Egorova MA. Psychological readiness for maternity of girls - pupils of boarding institutions. *Psychological science and education*. 2012;17(4):79-87.
11. Filippova GG. Evolution of the structure of maternal behavior. *Psychology today*. 1996;2(3):126-127.



DIGITAL TECHNOLOGIES IN THE CORRECTION OF WRITING DISORDERS IN CHILDREN

Olga Shterts, Galiya Ldokova

Abstract. The article deals with the problem of using digital educational technologies in corrective work with children with writing disorders. The authors of the article ask themselves how the use of digital technologies increases the effectiveness of correctional work. The article also considers the problem of asynchronism of cognitive processes and emotional intelligence in children with dyslexia through the prism of using digital educational technologies. The paper presents the results of an empirical study of such cognitive processes as memory, phonemic perception and attention, as well as the level of development of interpersonal emotional intelligence and intrapersonal emotional intelligence, contains data on the results of a formative experiment using digital educational technologies in corrective work with children with writing disorders.

Keywords: asynchronism, cognitive processes, resilience, dyslexia, emotional intelligence, school failure digital educational technologies

Introduction

The problem of improving the quality of education of younger generations is one of the important problems in modern science. Modern socio-economic problems of society enquire from the individual to reveal optimally his own potential, his own knowledge, skills and abilities, to develop the ability and skills to solve the practical problems arising in the process of his social existence. Therefore, in many world powers there is an active search for opportunities, and potentials to increase the effectiveness of the educational system as a whole and bringing it into correspondence with the needs of modern society. Taking into account modern realities and the development of technological progress, digital educational technologies are being actively introduced into the educational process, designed to increase the effectiveness of educational and correctional activities of teachers.

The academic success of each child largely depends on the development of cognitive processes. However, it should be noted that many children with developmental disabilities, including impaired written speech, have problems in realizing their own abilities. Therefore, we consider it important and relevant to identify factors, including the possibilities of digital educational technologies, in the development of

abilities and success in children with disabilities in the development of writing and reading.

The term “school failure” in modern science is actively used in the interpretation of “school underperformance” and according to Russian researchers E.I. Isaev, S.G. Kosaretskaya and A.M. Mikhailov means the phenomenon of a student systematically lagging behind his peers in assimilating the school curriculum [1]. Most often psychophysiological and psychological features of students who have trouble in mastering the general education program and the lack of competence of parents and teachers in the field of pedagogy and psychology are considered to be the main reasons.

In foreign studies, the influence of socio-economic factors is considered the main reason for school failure. For example, Bourdieu P. and Eds. J. Richardson established a link between the academic success of students and the social and socio-economic characteristics of their families [2].

The phenomenon of academic resilience in modern psychological and pedagogical science is understood as the ability of students to demonstrate high results despite external and limiting circumstances.

We are interested in the interpretation of the phenomenon of “personal resilience». K.M. Ushakov defines resilience as the ability to achieve success within strong conditions notwithstanding the circumstances [3]. E.D. Miller considers the phenomenon of “personal resilience” from the point of view of demonstrating the ability to restore quickly physical and mental strength [4]. A.A. Muravyova and O.N. Oleinikova interpret resilience as the ability to meet adequately and overcome unfavorable circumstances and challenges while becoming stronger. This is the ability to control emotions and to master communicative skills [5].

In accordance with the definition given by A.A. Muravyeva and O.N. Oleinikova we tend to consider the “resilience of a person” through the prism of the emotional sphere. The emotional-will sphere is an important component in the development of children, since no communication, interaction will be effective if its participants are not able firstly to “read” the emotional state of another person and secondly to control their emotions. In other words, they are not able to have a high level of development of “emotional intelligence.” In our opinion the ability to build effective interpersonal communications contributes to the formation of a successful personality in social sphere.

At the beginning of the 20th century, the concept of “Emotional Intelligence” was actively introduced into the cognitive psychology. For the first time the problem of emotional intelligence was published in the works of J. Mayer, P. Salovey and D. Caruso [6]. They proposed one of the first definitions of emotional intelligence and showed that it could be measured. They characterized the emotional intelligence as a group of mental abilities that contribute to the awareness and understanding of their emotions and those of other people.

Lucin D.V. [7] connects emotional intelligence with an interest in the inner world of people, including his own.

Goleman D. [8] considered emotional intelligence to be such abilities as self-motivation and resistance to disappointments, control over emotional flashes and the ability to refuse pleasures, mood regulation and the ability not to give experiences drown out the ability to think, empathize and hope.

In general, it can be concluded that emotional intelligence allows individual to know his own emotions and those of other people and use the data to solve problems and regulate behavior.

We consider the phenomenon of asynchronism of cognitive processes as the lack of synchronicity, non-coincidence, the difference in the development of cognitive processes particularly between children with dyslexia. The problem of asynchronism of mental processes corresponds to the problem of dissynchrony.

In Russia and France, the problem of dissynchrony was actively considered from the point of view of various approaches: environmental and general psychological influences. One of the important aspects of the analysis of the level of mental development from the point of view of dissynchrony is the consideration of this phenomenon from the point of view of the presence of psychological obstacles that hinder the development of abilities and the interaction of the individual with society. According to the definition of I.F. Sibgatullina the phenomenon of dissynchrony of mental development manifests itself in the mismatched state of systems of interconnected mental phenomena at a certain moment of their development and in the imbalance of cognitive, emotional, somatic and other components of mental state including speech [9].

In modern conditions speech therapy is no longer conceivable without the use of new computer technologies. Speech therapist himself can prepare tasks electronically using programs such as MS PowerPoint, Word, Excel and others. Electronic books (children’s encyclopedia DVD,

CDs (Marshak's Merry Alphabet, Aunt Owl's Lessons, Voices of Birds and Animals, Marousia and Speech Therapist, Speaking Speech Therapist, Difficult Sounds, Merry Logorimics by E. Zheleznova, reference books, etc.) special computer games.

Based on the objectives of our study, we believe that it is necessary to consider the possibility of using digital educational technologies in the development of cognitive processes to improve the efficiency of correctional work.

Identifying the specifics of the functioning of cognitive processes of children with dyslexia will determine the impact of cognitive processes on the effectiveness of children in the learning process and more competently and effectively build corrective activities.

Research methods: theoretical analysis of the literature on the problem of research. The empirical methods used are testing, observation, and analysis of products of activities (written works of students, indicators of educational performance), methods of quantitative and qualitative analysis of research results. The empirical diagnosis of written speech violations was attended by 302 students of grades 2-4 of secondary schools of the Republic of Tatarstan. As diagnostic tools, we used the following diagnostic methods according to I.N. Sadovnikova [10]: auditory dictation, hearing writing, syllable dictation, syllable dictation of various structures, sentence recording after a single listening, writing off words and sentences from printed text. To diagnose cognitive processes the following methods were used: corrective sampling and memorization of 10 words according to A.R. Luria [11]; Schulte tables [1]; methods for diagnosing visual memory, test of phonematic hearing by Yu. Gilbukh [12], D.V. Lyusin's emotional intelligence questionnaire [13].

On the first step of our study, we analyzed the students' reading and writing skills to identify the nature of specific errors of children with dyslexia. We used the diagnostic technique for dyslexia by I.N. Sadovnikova.

At the second stage of our study, we conducted a formative experiment. During the formative experiment, based on the goals and objectives of our study, children with dyslexia were divided into two groups: experimental and control. In an experimental sample of research at corrective and developmental classes, along with traditional technologies for correcting written speech disorders, innovative technologies were

used including digital computer programs (BOS-Health hardware and software complex and speech therapy simulator with Delph-141.2 digital software). In the control sample of the study, only traditional technologies for correcting writing disorders were used.

According to the results of an empirical study 73% of children from the experimental sample showed mixed dyslexia, 11% of the children examined showed signs of acoustic dyslexia, 8% showed dyslexia against the background of impaired language analysis and synthesis, 8% showed agrammatic dyslexia.

In the process of studying of cognitive processes (attention and memory), it was revealed that attention processes of the children with dyslexia are most affected. Attention resistance of 63% of children with dyslexia is below the average level of development, and 37% of children have an average level of attention development. At the same time, it should be noted that the accuracy of tasks fulfillment of 84% of children with dyslexia is at a high level and only 19% at an average level. Therefore, if children with dyslexia are given a little more time to complete tasks, it can help to reduce the number of errors made by the child during writing and reading and as a result improve the quality of the task performed.

The study of memory according to the method of A.R. Luria made it possible to conclude that children with dyslexia hardly remember information by ear, but after a certain period of time they very quickly forget the previously remembered information. 8% of students with dyslexia have low sound-speech memory, 73% of children with dyslexia have the average level of development, and 19% of students with impaired written speech have a high level of development of hearing-speech memory.

Also during our study, we diagnosed the level of visual memory development of children with dyslexia (Table 1). In the process of diagnosis we revealed that children with dyslexia have a high level of visual memory (84% of respondents have a high level, 12% have an average level and 4% have a low level). Therefore, we can conclude that visual memory of children with dyslexia is more stable. Therefore, in corrective work, it is necessary to rely on the stored functions of visual memory. To increase the efficiency of assimilating educational material to children with impaired speech and reading it is necessary to consolidate the studied topic through stimulation of visual images.

| | Phonematic hearing | Visual memory | Self-control |
|---------------|--------------------|---------------|--------------|
| High level | 51% | 84% | 35% |
| Average level | 42% | 12% | 35% |
| Low level | 7% | 4% | 30% |

Table 1

Development of cognitive processes and self-control of children with dyslexia

In the course of an empirical study, we identified the level of development of phonematic hearing in children with dyslexia. “Phonematic hearing” and “phonematic perception” according to R.I. Lalaeva are synonyms. The term “phonematic perception” notes special mental actions to distinguish phonemes and establish the sound structure of a word and corresponds to modern ideas about the processes of speech perception [14]. Thus, phonematic hearing refers to cognitive processes and is included in the tasks of our research.

Phonematic hearing in children with dyslexia is developed at a level above average (51% of respondents have a high level, 42% have an average level, 7% of respondents have a low level). Based on the results of our study we see that children with dyslexia can recognize and distinguish phonemes. However, in some cases, due to sound transmission defects of children with dyslexia, phonematic hearing decreases. As a result, errors are made when writing and reading.

Based on the aim and the objectives of our research we diagnosed the level of development of emotional intelligence. The results of the emotional intelligence study are shown in Table 2.

| Level | Interpersonal emotional intelligence | Intraspecific emotional intelligence | Understanding Emotions | Emotion Management |
|---------------|--------------------------------------|--------------------------------------|------------------------|--------------------|
| low | 65% | 28% | 74% | 21% |
| below average | 5% | 14% | 2% | 16% |
| average | 21% | 35% | 12% | 35% |
| above average | 0% | 7% | 5% | 0% |
| high | 9% | 16% | 7% | 28% |

Table 2 Indicators of the level of development of emotional intelligence of children with dyslexia

According to our study we revealed that interpersonal emotional intelligence of children with dyslexia is developed at a low level (65% of respondents have a low level of development of interpersonal emotional intelligence and only 9% of respondents have high level of emotional intelligence). Therefore, children with dyslexia struggle to recognize and control the emotions of other people, as well as predict the behavior of another person who is under the influence of certain emotions. Intrapersonal emotional intelligence in children is developed at the middle level. That is, children with dyslexia are in most cases able to recognize their own emotions and experiences, to determine the factors that cause them. Children with dyslexia also have middle level of development of emotion management. If we look at the results of the self-control study from Table 1, then we see that self-control of children with dyslexia is developed at the middle level. Thus, children are most often able to control their own emotions, their intensity and external expression. Based on our empirical study we see that intra-personal emotional intelligence is developed at the middle level, and interpersonal emotional intelligence at the low level.

In our opinion, the ability to understand emotions, the emotional state of other people will contribute to building effective communications in the process of interpersonal interaction of children with dyslexia with others and will increase personal resilience.

A formative experiment using such digital technologies as the BOS-Health hardware, software complex and a speech therapy simulator with the Delph-141.2 digital software showed that as a result of conducting corrective and developmental classes in an experimental sample, statistical analysis showed that 33% of children demonstrated a tendency to increase the level of development of concentration and attention distribution ($t = 2.24$ at, $p \leq 0,05$). Based on statistical analysis data ($t = 2.73$ at, $p \leq 0,01$), we can prove that 44% of children had improved memory volume scores, 48% ($t = 2.78$ at, $p \leq 0,01$) of children had decreased the number of specific errors on writing. Digital technologies had a particularly positive effect when working out the skills of sound analysis of a word and the lexico-grammatical system of speech. Children from the control sample of the study also had progress, but slightly lower: 25% of children improved in terms of concentration and attention distribution. However, statistical analysis using Student's t-test compared to the level of attention development of the recording experiment and the forming experiment showed that this difference was not statistically significant

($t = 1.82$). In 40% of children from the control sample, there was a tendency to increase memory volume ($t = 2.54$ at, $p \leq 0,05$). Therefore, we can conclude that the traditional methods of corrective work used in speech therapy contribute to the development of auditory memory. In 28% of children, the number of specific errors on the letter decreased (this difference is not statistically significant).

Thus, we can conclude that in the process of empirical research it was revealed that one of the reasons for the school failure of children with impaired written speech is disorders in the visual-spatial processing of information, difficulties in the functioning of auditory memory. Exercises aimed at correcting neurological disorders, speech-related disorders associated with sound impairment defects, as well as the development of cognitive processes such as attention and memory will contribute to increasing the resilience of children with dyslexia. It is necessary to increase the rate of activity and mental resilience of children with dyslexia in order to create conditions for achieving educational goals.

The use of digital educational technologies in correcting impaired written speech has a positive effect on increasing the level of concentration and distribution of attention, memory volume, which in turn allows reducing the number of specific errors made by children during reading and writing.

To improve interpersonal interaction it is necessary to work with children with dyslexia and to increase the level of interpersonal emotional intelligence.

Conclusions:

- 1) Children with dyslexia are characterized by a decrease in the level of development of phonematic hearing, which directly affects the sound-letter analysis of the composition of the word and contributes to errors in acoustic-articulation similarity of letters.
- 2) Children with dyslexia have a low level of performance, a high level of fatigue, a reduced level of development of the ability to concentrate attention, difficulty in perceiving and assimilating information when activating the auditory analyzer.
- 3) Children with dyslexia have emotional lability, which is manifested in uncertainty in their own actions, mood swings, in the inability to restrain their own emotions, as well as in the occurrence of difficulties in recognizing the emotions of other people. Mental instability of the person affects the decrease in concentration of attention, the effectiveness of communicative abilities and activities.

- 4) Dyslexia correction should be carried out on the basis of an integrated approach and include not only correction of specific errors made by the child during reading and writing, but also work on the development of cognitive processes, personal mental stability (for example, self-regulation skills), interpersonal emotional intelligence.
- 5) The use of digital educational technologies in corrective work of cognitive processes such as attention and memory helps to reduce the number of specific errors made when writing letters and letters associated with omissions and insertions when reading and writing of children with dyslexia.

The results of our research complement the scientific representations of modern personal psychology and special psychology with data on factors of increasing of personal resilience through the lens of asynchronism of cognitive processes and can be used in the process of organization of educational activities of children with impaired written speech in order to increase the effectiveness of teaching and upbringing methods.

Acknowledgments

This paper has been supported by the Kazan Federal University Strategic Academic Leadership Program

References

1. Andreev A. Schulte Tables. Lithres: Samizd; 2021. 207 p.
2. Volkova GA. Methodology of psychological and speech-medical examination of children with speech disorders. Issues of differential diagnostics: Educational and methodological manual. St. Petersburg: CHILDHOOD PRESS; 2004. 254 p.
3. Isaeva EI, Kosaretskaya SG, Mikhailova AM. Foreign experience of preventing and overcoming school failure in children raised in families with low socio-economic status. Modern foreign psychology. 2019;8(1):7-16.
4. Lalaeva RI, Benediktova LV. Violation of reading and writing among younger schoolchildren. Diagnostics and corrections. Rostov N/A: Phoenix, St. Petersburg: Soyuz; 2004. 224 p.
5. Luria AR. Higher cortical functions of human. St. Petersburg: Peter; 2018. 768 p.
6. Muravyova AA, Oleinikova ON. Underestimated competence or pedagogical aspects of the formation of resilience. Kazan Pedagogical Journal. 2017;2(121):16-21.
7. Sadovnikova IN. Dysgraphia, dyslexia: coping technology. Moscow: Para-

- digm; 2016. 280 p.
8. Ushakov KM. The new word is “residency “. School director. 2016;7:2-3.
 9. Bourdieu P. The forms of capital. In: Richardson, J., Handbook of Theory and Research for the Sociology of Education. Westport, CT: Greenwood. 2014:241-258.
 10. Goleman D. Working with Emotional Intelligence, Bloomsbury; 2020. 386 p.
 11. Lyusin D. The ANT in a Russian sample: Testing the independence of attention networks / The Russian Journal of Cognitive Science. 2015;1.2(2-3):66-69.
 12. Miller ED. Reconceptualizing the role of resiliency in coping and treatment. Journal of loss and trauma. 2003;8:239-246.
 13. Mayer JD, DiPaolo M, Salovey P. Perceiving affective content in ambiguous visual stimuli: A 63 component of emotional intelligence. J. Pers. Assessment; 1990;54(3-4):772-781.
 14. Sibgatullina IF. Is the talent management mission inspired? No: Proceedings of the VII International Makhmutov readings on Problem education in the modern world. Kazan, Elabuga: 2018, April 5-6. 2018. p. 152-160.



ANALYSIS OF SOME ASPECTS OF THE DEVELOPMENT PROJECT MANAGEMENT FOR GIFTED STUDENTS

Ilya Ushakov, Snezhana Ushakova, Oksana Tatarinova

Abstract. The article discusses benchmarking of project management of gifted education in the context of global digitalization of the world as a whole. The active use of digital education at all its stages, especially in the context of the COVID-19 pandemic, is shown. The global practice of talent management is also turned into a new experience in the application of digital competencies and their integration into education. In this regard, there is an acute shortage of digital mentors for different segments of the learning population around the world and for talent management systems. The digital mentor plays an essential role in the implementation of international and regional strategies for the development of education and actively participates in the creation of user interfaces for educational systems of educational organizations. The primary task is to attract digital mentors to the implementation of educational retraining programs for teachers and university teachers and integrate their skills to the needs of formal and non-formal regional education at all levels. The purpose of this study was to determine the primary management methodology of digital mentoring in formal education.

The study used descriptive methods, the method of benchmarking intellectual integrations as an analysis of best practices in international digital education. As a result of the study, the primary management vectors of the development of digital mentoring as an innovative format of education and talent management were identified. Reflections on the implementation of digital education projects and the use of project modules in the personal development of participants in the educational process “prompted” the authors to identify another strategic vector of digital mentoring, which should be aimed at overcoming personal barriers in the development of new digital environments for both mentors and students, and finding their place in these environments. This vector may represent further research prospects. The materials of this article will be useful to directors of institutes of continuing education, heads of departments of continuing professional education, institutes of pedagogy in the structure of universities, regional institutes of education development, researchers of integration processes of education.

Keywords: development of the gifted, intellectual integration, digital education, digital mentoring, digital competence, innovation, Google generation, i-generation.

We live in a time of constant change, which is caused not only by progress, but also by the COVID-19 pandemic. These changes affect educa-

tional development strategies and various forms of interaction between education managers and teachers working with the gifted.

At the August 2020 EU educational meetings, the “new picture of reality” was called asynchronous [1]. Therefore, the EU Education Committee speaks of the need to develop and optimize the system of training and retraining of educational personnel no longer for analog, but digital education. It becomes clear that the trend towards digitalization has embraced education in general and the field of mentoring and talent management, in particular [2].

This means that institutes for the development of gifted education around the world will use digital relationships, implementing partner training programs for teachers, creating new programs for working with gifted people at different levels of education.

Benchmarking of digital interaction in the field of development of the gifted has already begun in many countries [3].

Not only in benchmarking the development of the gifted, but also in any field, special skills are needed to work with digital technologies:

- have pedagogical digital competence. This means that a person has the ability to consistently apply attitudes, skills and attitudes, as well as technologies, learning theory, subject, context and learning, as well as the relationships between them. This competence can develop as the teacher or specialist becomes more experienced [4].

- be aware of the connection between mastering digital technologies and increasing professionalism, improving results in professional activity.

It follows from this that the modern education system today has a new function: to strengthen motivation to master digital competencies, to develop the ability to work in accessible digital environments, to create new content and learning resources.

And let's not forget that educational ecological systems must be very flexible, but at the same time strong, in order to include digital forms and teaching methods.

In addition to digitalization, it is necessary to point out the importance of intellectual integration in current education strategies. In tandem, intellectual integration and digitalization lead to effective learning and development of the gifted.

The third pillar of the success of the management of gifted development projects is their lack of awareness of their own educational prospects and correlation with them of the individual level of development.

In this regard, it is necessary to create a personalized assessment of the current achievements of teaching and development in the benchmarking system. Such a system will make it possible to detect “visible competencies” and a concrete picture of what school students and students need to know in order to obtain certain skills and abilities.

Due to the fact that the most relevant skills of the XXI century are considered not only professional competencies, but also creativity and critical thinking [5], the “trend” is now the study of “end-to-end technologies”: neurotechnology, artificial intelligence, virtual and augmented reality technologies, etc. Moreover, these areas interact with the moral and ethical values of the individual, which relates to the sphere of professional activity of teachers.

Considering the trajectory of the development of the gifted in the digital environment, it is necessary to take into account the possibilities of continuing education of formal and informal type and be sure to offer a person an unlimited “schedule” of development. For example, a student or a student can study at foreign universities online and at the same time use educational programs for the gifted in their region.

In addition, all parameters of educational programs for the gifted should correspond to the peculiarities of the thinking of the “Google generation”. It is the representatives of this generation who prefer to receive information and share it with the help of gadgets that have conditioned the digitalization of education with their cognitive needs.

A synonymous concept is the term “iGeneration”, which reveals a certain dependence of modern youth on mobile devices.

The task is complicated by the fact that the main sample of digital mentors will be made up of representatives of these groups; and here education managers should have in stock retraining programs of a format that would be perceived by these specialists and adequately fit into regional talent management systems [6].

The complexity of the management process is compounded by the fact that educational development institutes and institutes of additional professional education of development universities have not yet developed strict linearity in the forms of implementation of these strategies.

I.F. Sibgatullina-Denis speaks in favor of teamwork between people who already have digital competencies and people who are just mastering them. Despite the fact that students and their teachers may be in the same team, this does not contradict the canons of digital mentoring: “Everyone teaches everyone.” It is worth noting that this model is rele-

vant in the field of talent management, or additional professional education. To some extent, it “breaks” the classical worldview of teachers who are used to teaching along a “top-down” trajectory. However, it is important for a modern teacher to realize himself using the possibilities of digital education.

In this situation, a necessary tool for project managers to work with the gifted is benchmarking, that is, an analysis of best practices and independent reflection on its application to their own professional activities. In this case, various already formed competencies and competencies that require development will form a “matrix of necessary development” [7].

There is another question related to the modern education of the gifted. If a person does not set a goal to get rid of barriers when mastering the digital environment, his success in this area will be impossible. On a global scale, this means that the issue of human capital management will remain unresolved. Note the fact that the process of the digital age will only worsen this problem.

So, the danger in education is the rejection of benchmarking in the conditions of the so-called initial accumulation of capital and the dominance of non-professionals in the digital business.

Education was directly affected. It is fair to note that intellectual potential remains in demand, adjusted for the level of mastery of digital competencies.

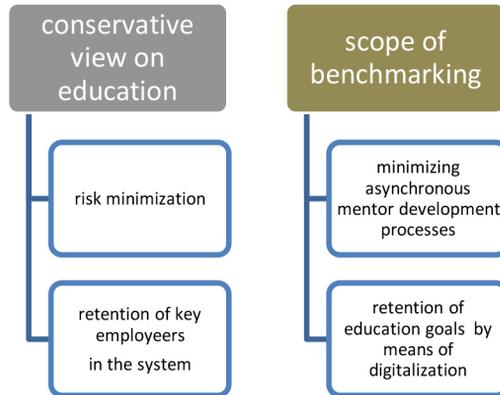


Fig. 1 Comparing views on education

It is worth noting that the professions of a teacher and a teacher-mentor of the digital environment are now in demand in the labor market. The value sense and their essence presuppose the presence of such qualities as originality, improvisation, critical thinking, the ability to assess complex situations and make decisions, the ability to manage and convince, which are included in the list of qualities and skills required of a person, discussed today by specialists as advantages in the modern labor market in the digital era.

References

1. European Commission. Recommendation of the European Parliament and of the Council Official of the key lifelong learning competences. Journal of the European Union. 2021;394:10-18.
2. Sibgatullina I, Riabov O, Merzon E, Vančová A, Sulovská M. Digital perspectives of benchmarking education in conditions of uncertainty. *Paedagogica specialis 34 : zborník vedeckých príspevkov Pedagogickej fakulty Univerzity Komenského v Bratislave*. – : 1. vyd. ISBN 978-80-223-5049-5. – Bratislava: Univerzita Komenského v Bratislave, 2020. p. 261-271. Available at: <http://alis.uniba.sk:9909/lib/item?id=chamo:373043>
3. Raif-Riabov O, Merzon E. Indefinite “Coup” of Digital Education and Certainty of Reality. No: Proceedings of the 2019 International Conference on Pedagogy, Communication and Sociology (ICPCS 2019), China, Ningbo, Academic Exchange Center of Ningbo Institute of Technology, May 25-26, 2019. Paris, Atlantis Press; 2019. p.16-19. DOI: <https://doi.org/10.2991/icpcs-19.2019.3>
4. From J. Pedagogical Digital Competence-Between Values / Knowledge and Skills. *Higher Education Studies*. 2017;7(2):43-50. Available from: <http://www.ccsenet.org/journal/index.php/hes/article/view/67799>
5. Nazajkinskaya O, Ovchinnikova N. NMC Horizon Report: 10 trendov budushchego obrazovaniya [Internet]. 2017. Available from: <http://trends.skolkovo.ru/2017/10/10-trendov-budushhego-obrazovaniya/>
6. Sibgatullina-Denis I, Riabov OR, Merzon EE, Vančová A. Descriptive Analysis of Benchmarking in Respect to SMART/UNI-Q Systems’ Intellectual Integrations within the European Higher Education Area. *Integratsiya obrazovaniya = Integration of Education*. 2020;24(4):532-551. DOI: <https://doi.org/10.15507/1991-9468.101.024.202004.532-551/>
7. Michaels E, Handfiels-Jones H, Axelrod B. *The War for Talent*. Boston, MA: Harvard Business Review Press; 2001. p. 90-120. TalentCode. Available from: <http://www.talentcode.ru/services>



COMPARISON OF FULL-TIME AND DISTANCE LEARNING

Ivan Zotin, Alina Paradaeva, Dilyara Farshatova

Abstract. The article discusses the characteristic features and methods of distance and full-time education. The integration of full-time and distance learning forms in connection with the active development of information technology in the era of the coronavirus pandemic is analyzed. The place of distance learning in the modern educational process is described. The advantages of information and communication technologies that create opportunities for didactic interaction are considered. A comparative analysis is made in the form of a diagram between distance and full-time forms of education. The advantages and disadvantages of each of the forms of learning are investigated, from which conclusions were drawn about the desirable “hybrid” method of learning as a combination of the advantages of each forms. The experience of distance learning among students, undergraduates and university teachers in Yelabuga is studied to find out the preferences and disadvantages of each of the teaching methods.

Keywords: distance learning, full-time education, information technology, educational process, digitalization of education, coronavirus pandemic, student-teacher interaction.

Scientific significance

The results of the study can be used in the development of general and special training courses. Application in the educational process of a combination of full-time and distance learning, as an innovative and promising model of learning in the future. Thus, hybrid educational technology is due to the undoubted synergistic effect of the mutual complementation of traditional and online forms and means of education that are different in nature.

Relevance

It should be noted that 2020, as a whole, has become a kind of challenge for the world community due to the fact that a wave of a pandemic in the form of a Corona-virus has swept across our planet. The educational process, in this regard, has also become no exception. Previously, a small part of students preferred full-time education, since this form of education was more familiar. Now we can safely say that the distance learning form plays an important role today, as it has a number of advantages in contrast to the full-time form.

Thus, a comparative analysis of full-time and distance learning lies in the fact that educational institutions were able to quickly respond to such a challenge by being able, firstly, to offer new tools in the form of

introducing various programs, new teaching methods that help facilitate teaching without resorting to live communication. Secondly, to show a new vector for the development of education in the future, assuming that it will take place in a distance format. It is also worth adding that such changes in the teaching format are necessary, because they help us better understand the wishes of both students and teachers in general.

Characteristics of full-time education

The spread of distance learning in all developed countries is a natural stage in the development and adaptation of education to modern conditions. Universities are gradually changing the principles of organizing the educational process, creating conditions for the implementation of flexible, individualized learning, implemented in a virtual information and educational environment.

Distance learning is not a new phenomenon. Its appearance is associated with the spread of correspondence education, traditional correspondence education, education through TV schools, etc. Previously, distance education was not considered so significant for social and economic development. Recently, the situation has begun to change, mainly due to the growing interest of teachers and students in the use of new information and communication technologies that create new opportunities for didactic interaction. Of course, the coronavirus epidemic has made huge adjustments to the learning process. "Distance learning has become an integral part of the educational process in recent years, and this fact has already been recognized all over the world" [1]. In conditions when the population of many countries is actually in isolation, it is impossible to do without distance learning. At the same time, it is necessary to analyze the features of the application of a new format of education, which should not only maintain, but also improve its quality in the context of further scientific and technological progress and the growing needs of the economy and the manufacturing sector for highly qualified specialists.

According to scientists, the current level of development of information and communication technologies lays a real foundation for a global distance learning system that helps people create an open information educational environment without borders.

New information technologies and mobile devices allow participants in the learning process to interact at a distance without leaving home or office, providing interactive communication between them, which has always been an indisputable advantage in the full-time learning system.

Economic factors also influence the spread of distance learning. “The cost of processing, storing and transmitting information on the network is steadily declining, while traditional full-time education is inaccessible for residents of regions far from the centers” [2]. In addition, the need for continuous professional development or retraining of personnel requires new approaches and the provision of a flexible educational process.

Distance learning began to develop long before the widespread use of personal computers and Internet technologies. Distance education in France began to develop actively in the first half of the 20th century. Thus, the “National Center for Distance Education CNED (Fr. Center national d’enseignement à distance) was founded on the initiative of the Ministry of Education back in 1939. The beginning of a new stage was associated with the founding of the Open University in Great Britain in 1969. In the 1980s, alternative teaching systems were actively developed in American general education (School Tech News, 1986)” [3]. Since the beginning of the 90s, the intensive development of distance learning in Russia has begun, especially after the adoption in 1995 of the “Concept on the Creation and Development of a Unified System of Distance Education in Russia”. To coordinate efforts in the field of distance education, appropriate structures were created in the Ministry of General and Vocational Education of the Russian Federation, the Eurasian Association of Distance Education, the Association of International Education, the Interuniversity Center for Distance Education of the Russian Federation on the basis of the Moscow State University of Economics, Statistics and Informatics (MESI), etc. a number of documents regulating the procedure for the use of distance learning technologies have been adopted [4].

The development of distance learning is accompanied by a number of contradictions. Despite the obvious advantages of distance education and a large number of works devoted to this topic, the conceptual and categorical apparatus of distance education is not well developed. The development of information and communication technologies sometimes outpaced the understanding of the scientific and pedagogical aspects of the problem. “In their studies, A. A. Andreev and V. I. Soldatkin noted the spontaneity of the emergence and development of educational institutions in which distance learning was conducted, based mainly on empirical experience in the absence of sufficiently substantiated models and technologies of distance education” [5]. In addition, govern-

ment regulations governing the legal framework for distance learning and labor relations have not been adopted.

Problems of development of distance learning are noted by foreign scientists. The difficulty lies in the fact that distance learning does not have a clear and defined learning theory, such as that of a traditional form of education. "The concept of distance learning includes many opportunities for the delivery of education that can provide effective learning in conditions where the processes of teaching and learning are separated in time and space" [6]. In real life, universities face a difficult task: "how to maintain balance under the influence of the eternal triangle of forces of education problems, namely, to improve quality, cut costs and serve more and more students" [7]. In the future, distance learning will play a decisive role.

Distance learning and distance education are new phenomena in pedagogy. It is therefore important to define the content of these concepts. "As noted in many publications, the uncertainty of the very concept of distance education and the ongoing discussions in the Russian scientific and pedagogical community about what it is - a new form of education, technology, a variety or a synonym for distance education" [8]. The lack of a targeted study and, accordingly, a clear understanding of the state, problems and needs of the development of distance education made it impossible to further develop the relevant practice, to conduct a meaningful state policy aimed at the transition to more modern forms of distance education that meets the requirements of Russian society.

"Distance education, teaching is a method of transferring knowledge, skills and a system of views through the use of technology for the division and scientific organization of labor, as well as through the active use of technical means, especially in the process of developing high-quality educational materials" [9]. This method allows you to simultaneously teach a large number of students, regardless of their place of residence. This is an "industrialized" form of learning and teaching [10]. This description is based on the two elements mentioned earlier: the separation in time and space between the teacher and the student, and the use of technical means. However, Peters goes further than other authors and comes to the conclusion that the didactic model of distance education is best interpreted by applying to it the concepts of industrial production: in particular, productivity, division of labor and mass production. "The mechanization and automation of teaching methods, as

well as the dependence of learning effectiveness on planning and organization (and not on the ability to teach) leads the author to the idea of a completely different role for the teacher in distance education than his traditional role in a lecture or seminar” [11].

Developing the essential characteristics of distance education, Peters defines the features of the relationship between a teacher and a student in the distance education system. These relations, according to Peters’ characterization:

- subject to technological rules (and not social norms, as in full-time teaching);
- supported by non-emotional language (not live speech);
- based on the limited ability to analyze and guide the needs of students (in the absence of personal communication);
- allow you to achieve your goal through productive work (and not through personal interaction).

According to Peters, “distance education is based on a new scientific theory that differs from traditional didactics, obeys the laws of its didactic structure, has great pedagogical potential, as well as didactic shortcomings, and represents yet unexplored opportunities and dangers for both teachers and students” [12].

The analysis of domestic and foreign practice of distance education allows us to identify the characteristic features inherent in distance education:

Flexibility. As a rule, students do not attend regular classes in the form of lectures, seminars, but study at a convenient time, in a convenient place and at a convenient pace [13]. Everyone can study as much as he individually needs to master a training course, a particular discipline, to obtain the necessary knowledge in the chosen specialty.

Modularity. Distance education programs are based on the modular principle. Each individual discipline (training course), which is mastered by the student, is adequate in terms of the content of a certain subject area. “This makes it possible to form a curriculum from a set of independent (but, of course, logically interrelated) training courses that meets individual or group needs” [14]. There is a unique opportunity, which is not yet characteristic of traditional forms of education, when the student forms for himself an almost personalized curriculum reflecting his individual predispositions.

Parallelism. The training can be carried out in combination with the main professional activity or in parallel with other training.

Long-range action. “The distance from the territorial location of the student to the location of the educational institution is not an obstacle to an effective educational process” [15].

Asynchrony. In the learning process, the trainee and the trainee can implement distance learning technology regardless of time, i.e. according to a schedule or schedule convenient for each.

Reach, or “mass”. “The number of students is not a critical parameter. They have access to all kinds of sources of educational and reference information (electronic libraries, information databases), and can also communicate with each other and with the teacher through telecommunication networks and means of communication” [16].

Profitability. This is a high economic efficiency of distance education. “The assessment of foreign and domestic experts shows that distance education costs about 1.5–2 times cheaper than other forms of education” [17].

New information technologies. All types of information technologies are used, but mainly new information technologies (computers, computer networks, multimedia systems, etc.).

Sociality. “Distance education to a certain extent relieves social tension, providing an equal opportunity to receive education, regardless of the place and conditions of residence and, to a certain extent, of material conditions” [18].

Internationality. Distance education promotes the export and import of educational services.

These features determine the advantages of distance education over other forms of education. “At the same time, distance education imposes certain requirements on both the teacher and the student, in no way facilitating, and sometimes increasing the labor costs of both” [19].

The key word of distance education is interactivity — the constant systematic interaction of the teacher and students, as well as students with each other in the educational process. “Interactivity in the distance form is realized at two levels: at the level of interaction between the teacher and students and at the level of interaction of students with the learning tools they use, mainly network learning tools” [20].

“The means of implementing all components of the distance education system have a specific effect on each of the components of the learning system, determining their selection, structuring, organization” [21].

Relying on the State educational standards of higher professional education and other normative documents, the charter of the university, the curriculum, etc., the teacher, depending on the didactic task being solved, makes creative choices in the use of certain pedagogical technologies, types of activities at various stages of training. The inclusion of new educational technologies (distance learning, case studies, computer stimulators, business games, project methods, etc.) in the system of continuing education is an important condition for its development.

Thus, distance learning should be considered as a form along with full-time, part-time, part-time and external. Distance learning uses traditional and innovative methods, means and forms of education based on computer and telecommunication technologies. The basis of the educational process at the DO is the purposeful and controlled intensive independent work of the student.

Comparative analysis of full-time and distance learning

In order to identify the advantages and disadvantages of each of the forms of education, we conducted a specific sociological study (in the form of a questionnaire) among students, undergraduates and teachers of the university in Yelabuga to clarify the preferences and disadvantages of each of the methods; determine the reasons for preference. The questionnaire contains closed and open questions. An analysis of the pros and cons of each of the forms of education was made, from which conclusions were drawn about the desirable “hybrid” method of education, as a combination of the advantages of each of the forms.

The study was conducted in the form of a survey and questioning. Students of all courses, different faculties, various specialties, with instruction in Russian were surveyed.

We have compiled two questionnaires (for students and for teachers), including: the title part, closed and open questions.

Description of the survey:

Part I

Questionnaire for students:

1. Personal data: Full name, phone number, university name, course, academic performance

Questionnaire for teachers:

1. Personal data: Full name, phone number, university name, academic degree and title, age

Part II

Questionnaire for students and teachers:

- 1) Contains a closed question: What form of education do you prefer? Answer options: 1) offline (classroom)
- 2) Online (remote). III part

Questionnaire for students and teachers. It contains the same two questions for students and teachers:

- 1) What are the advantages of offline (classroom) learning and its disadvantages.
- 2) What are the advantages of online (distance) learning and its disadvantages.

The difference in the first part is made for the following purposes:

- a) for students - allows you to trace the dependence of preferences on academic performance (excellent student, good student, triple student);
- b) for teachers - dependence on scientific degree, academic title and age.

A closed question will allow you to calculate the percentages of preferences among students and teachers. Open-ended questions will help to find out the reasons for the preferences of online and offline learning among students and teachers.

Results:

- Of the students surveyed - 22% prefer online learning
- 78% prefer offline learning. (diagram 1)
- Of the teachers surveyed - 6% prefer online learning
- 94% prefer offline learning. (diagram 2)

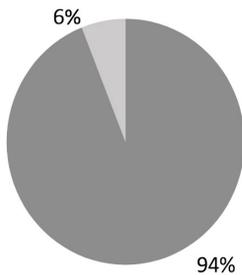


Fig. 1 Student survey results

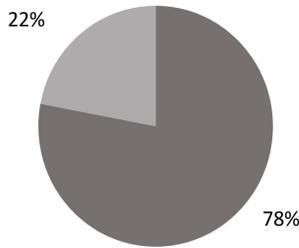


Fig. 2 Teacher Survey Results

Students named the following as the advantages of classroom (of-line) learning: Direct psycho-emotional contact between students and teachers (82%). Learning atmosphere, better perception of information, clearer explanation (80%). Better assimilation of the material (70%).

More interactive, the possibility of teamwork, feedback, greater availability of information, the possibility of direct contact with teachers (55%).

Higher degree of involvement in the educational process and higher concentration (25%). Socialization, exchange of opinions, discussions (25%).

As disadvantages of classroom (offline) education, students named:

Wasting time on the road, money on transport (88%). Non-compliance with quarantine measures (62%).

Inconvenient schedule (40%). The second shift of training (40%).

As advantages of online learning, students named:

Saving money and time (98%). No risk of infection (90%). Comfortable home conditions (66%). Ease of scheduling (60%).

You can pretend that you are present at the lesson and go about your business (22%). It is convenient to combine with work (15%).

Convenient for female students with children (12%).

As disadvantages of online learning, students named:

Difficult contact with the teacher, the complexity of interactive interaction, the lack of live communication (85%).

Low involvement in the educational process (82%). Internet service is not good enough (80%). Lack of a reliable internet platform (76%).

Lack of feedback, an additional barrier in communication (70%). The worst assimilation of the material (65%).

Long stay at the computer (42%).

Teachers named the following as advantages of classroom (offline) learning:

Direct psycho-emotional contact with the audience. Better understanding of the material of classes by students (100%).

Possibility of full control (100%). Conducting classes in interactive forms (96%).

The ability to determine the degree of assimilation of the material by students (95%). Evaluation of the opinions of all students (90%).

Live communication, dialogue, discussion, free exchange of opinions, interconnection, positive energy (90%).

The possibility of a more understandable explanation, full disclosure of the topic (88%). Feeling the mood of students, interest in the lecture (45%).

Gestures, facial expressions, posture - everything works for the audience (18%). Ability to track students' non-verbal reactions (12%).

As disadvantages of classroom (offline) education, teachers named: The lack of equipment of some classrooms with TCO (technical teaching aids) (44%). Extraneous noise (15%).

Intrusion with administration checks on classes (15%). Students being late (12%).

As advantages of online learning, teachers named:

Saving material and time costs (95%). Convenient scheduling (90%).

The convenience of technical support, the possibility of presentations (90%).

Accelerating the process of digitalization, stimulating educational platforms, increasing the authority of online services, expanding digitalization (15%).

As disadvantages of online learning, teachers named:

Inability to monitor the presence and discipline of students (100%). Lack of feedback, psycho-emotional contact, live dialogue (100%). Interactive difficulties, an additional barrier in communication (85%).

Less digestibility of the material (60%).

Poor connection, Internet work, difficulties with the zoom platform (60%). Difficulty in grading (50%).

The analysis of the questionnaires showed that there is no dependence on the level of their progress among students. The analysis of the questionnaires showed that teachers also do not depend on their scientific degree, academic rank, or age. Students focused more on external

factors: saving material resources, time, comfort, etc. The teachers focused on student control, assessment of the quality of knowledge, student involvement in the learning process.

Some teachers and students (about 14-15%) offer a connected - "hybrid" approach - as a combination of the advantages of online and offline learning. Really,

"hybrid method" is the most convenient. Lectures are held online, seminars, practical and laboratory classes - offline. What benefits does it provide?

Lecture classes, where there are a large number of students and where it is impossible to maintain a social distance, are held in the distance learning mode (online). Seminars and practical classes, which, as a rule, are attended by 10-20 students, make it possible to ensure social distance between students. This greatly reduces the risk of spreading the infection.

Conclusion

The study identified the key problems faced by the university community in the transition to remote work. Among the problems stand out: the growth of educational inequality, the dependence of the quality of education not only on the capabilities of educational institutions, but also on the competencies and technical capabilities of students and teachers; increased workload on both students and teachers; possible decline in quality due to the spread of online education; rising cost of education.

Information and analytical work using Internet resources occupies a significant place in the development of materials. Students should be aware that this part of the educational process is of paramount importance for the formation of professional and general competencies of a modern specialist. In addition, up-to-date information on innovative courses is usually only available via the Internet. Most teachers and students emphasize that modern education is impossible without IT technologies. But what is the optimal combination of online and offline learning? Of course, you need to keep in mind that in some specialties (for example, medical), the preference is clearly for the classroom. Students of those specialties, where there is a lot of practical and laboratory work, also chose classroom training. In the liberal arts, the introduction of online classes is easier and their effectiveness is quite high. The choice of one of the forms of education (or a combination of them) should be made on the basis of the specifics of the field of education,

from the real tasks, needs, and technical capabilities of the university. In any case, both the advantages and disadvantages of each of the forms and their optimal combination in each specific case should be taken into account.

References

1. Andreev AA, Soldatkin VI. Applied philosophy of open education: pedagogical aspect. M.: RIC "Alpha" MGOPU; 2022. 168 p.
2. Balakin MA. Psychological and pedagogical problems of distance education. Pedagogical review. 2005;1:99-107.
3. Balashova YV. Cognitive and personal characteristics of full-time and distance learning students [Internet]. Available from: <http://psibook.com/scholarly/kognitivnye-i-lichnostnye-osobennosti-studentov-ochnogo-i-distantionnogo-obucheniya.html>
4. Gessen SI. Fundamentals of Pedagogy: Introduction to Applied Philosophy: study guide for universities. Moscow: School-press Publ.; 1995. 448 p.
5. Demkin VP, Mayer G, Mozhaeva G. Training for the Open and Distance Education System. Academic Council. 2005;9:52-57.
6. Robert IV. Pedagogical feasibility of using systems on the web-interface for implementing the interdisciplinary nature of training. Advances in Social Science, Humanities Research. 2018;2(88):36-40.
7. Dereshko BYu. Distance learning systems in the Russian educational space. Telecommunications and informatization of education. 2005;3:43-60.
8. Information and communication technologies in distance education. Specialized training course. M.: UNESCO Institute for Information Technologies in Education; 2006. 632 p.
9. Romanova OV. Functions of the teacher and the student in the information educational environment of the university. Izvestiya PSPU them. V.G. Belinsky. 2012;28:1006-1011.
10. Gavrilova MA. Creating a computer learning environment in a pedagogical university. Informatization of education. 2005;3(5):286-288.
11. Irkhina IV, Besedina OA. Organization of pedagogical support system of distance learning at University of London [Electronic resource]. Modern problems of science and education. 2013;2:57-61.
12. Karpenko OM, Lukyanova AV, Bugai VV, Shchedrova IA. Individualization of Learning: An Investigation on Educational Technologies. Journal of History Culture and Art Research. 2019;8(3):81-90.
13. Peters O. Die didaktische Struktur des Fernunterrichts // The Didactical-Structure of Distance Education: untersuchungen zu einer industrialisierten Form des Lehrens und Lernens. Weinheim: Beltz; 1973.
14. Keegan DJ. On Defining Distance Education. Distance Education. 1980;1(1):13-26.

15. Daniel JS. World Trends in Higher Distance Education and Opportunities for International Cooperation. In: UNESCO, Higher Level Distance Education. Paris / Victoria (Australia), UNESCO/Deakin University; 1987. pp. 17–42.
16. Distance and flexible learning [Electronic resource]. University of London: International Programmes. London, 2012. Available from: <http://www.londoninternational.ac.uk/distance-flexible-learning>
17. Moore MG, Kersley G. Distance education. A system View Belmont: Wadsworth Publishing Company; 1996. p. 219–222.
18. Schennikov SA. Open distance education; 2015. 527 p.
19. Team H M. Typical problems of distance learning. 2016;2(106):873-877
20. Gromova TV. Formation of readiness of a university teacher to work in the distance learning system. M.: TEZARUS; 2006. 32 p.
21. Education in a COVID-19 environment [Internet]. Available from: <https://etu.ru/ru/universitet/ostorozhno-koronavirus/raboty-po-preduprezhdeniyu/obrazovanie-v-usloviyah-covid-19-soveshhanie-prezidenta-rf-s-glavoj-minobrnauki-rossii>



REGULATION OF EMOTIONAL STATES WITH THE HELP OF INTERIOR DESIGN: A DESIGNER'S EXPERIENCE

Irina Nikolaeva

Abstract. The article describes the worldwide problem of increasing stresses in daily human life associated with the COVID-19 pandemic, the post-pandemic period and the turbulence of world events. The author reflects on the need to integrate and co-operate specialists from interior design and psychology in order to find ways of increasing people's emotional state and, as a consequence, their productivity. The author presents an interior design project in the process of renovating several office and leisure areas as a practical experience of solving the problem outlined above.

Keywords: emotional states, mental health, interior design, living and working environment.

An increasing number of people experience stress nowadays. Various studies are currently implemented to determine the impact of the COVID-19 pandemic on people's emotional states. Scholars in a number of countries are engaged in these studies which show they are important for different national societies. Mental health studies are especially timely at the moment because a growing number of people around the world are demonstrating various mental and behavioral deviations that have a bearing on their economic performance. According to the WHO, every fourth or every fifth person on the planet is currently suffering from mental derangement. Every third or every fourth person has experienced mental disorders during their lifetime. Around 7,000 adult citizens of the USA and Canada have participated in a study that has led psychologist Stephen Taylor to introducing a new psychological term, namely, COVID stress syndrome. A quarter of the respondents have been shown to suffer from this syndrome. "These people fear catching the infection very much. They are also worried about the social and economic consequences that the COVID-19 pandemic is going to bring about. They have nightmares about the coronavirus. They constantly monitor the pandemic-related news, which only increases their anxiety", said Taylor.

In February 2020, The Lancet journal published an article about the ways isolation affects people's mental health. The authors of the article had analyzed around two dozen reports published during previous epidemics (in particular, Ebola in 2014 and SARS in 2003). However,

these reports do not reflect the current situation as the coronavirus pandemic is an unprecedented event that has led to isolation on a global scale. Scholars have yet to analyze this unique situation and determine how exactly the pandemic affects people's mental health. It is already obvious, however, that many people have become more anxious and depressed under the current conditions. This makes specialists in various areas look for ways to normalize people's emotional states. Below I provide an example of how the interior design can improve the emotional state of the person and make it more balanced. Joint efforts of a designer, an architect, and a psychologist can lead to success and considerably lessen the stress. Let us see why specialists in these particular areas are required. Each of them plays their own role and each role is indispensable. The designer uses their knowledge and experience to create an attractive and aesthetically balanced environment by filling the space with carefully selected objects. The architect gives meaning to the space by making it ergonomic and efficient. The psychologist, in their turn, helps to fill the space with mental harmony by making sure that the interior elements evoke positive psychological reactions in the person inhabiting the space. Without doubt, a single person can fulfill these three roles simultaneously. But in any case, he or she has to have special knowledge in all three areas to let the space dweller restore the serenity of mind and find emotional peace.

The emotional background is a highly important concept as it has a direct bearing on the way the person perceives the world. If the person is stressed, he/she will paint all the events in grey colors and this state of mind can last for a long time. Psychological assistance is required in this case but one has to realize that the interior design of the space where the person lives or works is also very important for his/her mental health.

The pandemic that has hit the world is comparable to a storm that hit the ship of a medieval sailor: it is as unexpected and as devastating. There is only one thought in the sailor's head: how to live through the stormy night. And it is very important for him to stay calm and not to panic because when the rain is over, a beautiful rainbow appears and the sunshine is back again. Psychologists are conducting various studies to help people survive in the current situation and they are finding that the interior design of the space where the person lives and/or works has a great impact of their mental health, self-perception, performance and behavior.

Any person has to feel that they have the power to change things around them. Those who are active, who strive to achieve, who look for change will usually feel better in terms of their mental states. On the contrary, those who are depressed, often immerse in work trying to forget about their depression. The emotional background determines how active and efficient the person will be to a large extent. It will be interesting to note, for example, that those who have returned to their offices after working from home for a while demonstrate worse performance than before. They are frightened, depressed and emotionally unstable. As a result, many business owners are losing money because their employees' performance has worsened. A group of scholars under the leadership of Roger Ulrich has conducted an interesting study. They have tried to determine how the renovations in a hotel have contributed to the simplicity of finding the way in the building, to the customer satisfaction, and to the improvement of staff performance. Luckily, I was given a chance to do something similar. An old client of mine contacted me during the pandemic. He is the owner of a five-story business center in Kazan and his profits are directly related to the economic success of the companies that rent offices in the business center. So, he told me he was making much less money because some companies had left while some others struggled to pay the rent on time. Together we decided to find a complex solution of the problem. Naturally, a complex solution required some serious investments. Thus, we made a careful renovation plan that spanned over a one-year period. The interior design project that I describe below is completed by now.

The first problem that we tackled was the restrooms design. There are four restrooms on each floor and we refurbished the restrooms one after by one. We decided that one of the four restrooms on every floor had to have a shower. Besides, we equipped the taps with infrared sensors, installed motion detectors that would turn the lights on and off, as well as automatic water dispensers. I tried to create a relaxing atmosphere in the restrooms by using natural materials and decoration elements (Pictures 1-4).



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

The next step was to renovate the dining area. The business center did have a canteen but it had not been popular before because of its grey walls, uncomfortable chairs, an untidy counter, and total absence of ergonomics. People who lunched there actually contributed to their depression rather than lessened it. I suggested making the canteen into a cozy café with comfortable sofas and armchairs, nice music, and an authentic interior design. It is now very easy to make an order: the customer can use a tablet and make an order without leaving their chair. Besides, the Alice application (similar to Siri) recognizes words so the customer can simply talk to Alice thus making an order. We surveyed the tenants after the renovations had been completed and most of them said they were happy to have lunch at the café as they felt they could recharge their batteries there and return to the office for more productive work. Previously, many people would have lunch at their offices while it is important to change the environment during the lunch break from the psychological point of view. I used green plants, screens made of natural materials, and tables made of tree slabs to create a relaxing atmosphere in the café. I tried to make the place pleasant not only to the eye but to the touch as well (Pictures 5-8).



Picture 6



Picture 7



Picture 8

After that, we passed on to redesigning the offices. A business office properly designed does not only places the officers in an ergonomic and efficient manner but also helps solve a number of other tasks. In particular, it makes a positive impression on the visitors, lets them understand the work principles of the company, improves the officers' performance, and makes a positive impact on their psychology and emotions as well as their physiological health.

The offices come in three sizes in the business center: 18 m², 30 m², and 60 m². This fact made me think of designing the offices in three different ways. This was the most difficult part of the overall task: I had to create ergonomic, comfortable, and aesthetically balanced spaces. The office design is the first thing that the company client gets to appreciate (or not). It is not only the face of the company but its intellectual center too. Decisions are made there, meetings and negotiations are held, and contracts are signed. The office design is important for the company client but it is not less important for the company employees who spend the best part of the day there. The design has to be well balanced: there should be no irritating elements of decoration and neither should the space have an overly relaxing atmosphere. My task was to design the of-

office interiors in such a way that they would lessen the feeling of stress in the office occupants. The color spectrum plays one of the central roles in the contemporary office design practices. The choice of colors depends on a number of factors. One must realize that the colors of the interior will have an impact on the psychological state of the officers. There is a separate branch of psychology that studies the effects of colors on the human mind. It has been conclusively shown that the wrong coloring of the office space may decrease the working capacity of the officers as well as their mental alertness, slow down the mental processes, and contribute to the accumulation of stress. Bright colors have a negative impact on the nervous system making the person tire rapidly. Multicolored objects, in their turn, can cause persistent headaches. Calm halftones, on the contrary, improve performance. They do not interfere in the workings of the memory and information processing, which makes the officer more productive.

It has been noticed that combinations of warm and cold colors have a positive impact on the human psyche. According to psychologists, this is the best coloring for commercial and office buildings. Commercial buildings are usually designed in two different ways: some owners opt for the traditional neutral color spectrum while others like to experiment with the coloring of the interior elements. I chose the second option and I experimented with the colors. If you think that the choice of color depends only on personal preferences, you'd better think again. The wrong choice of colors will literally ruin the performance of the officers. A wise choice, on the contrary, can have many positive effects. In particular, the right choice of colors in the office will make the occupants feel concentrated and full of energy, which, of course, will put them in a favorable emotional state thus improving their overall performance. I was bearing these factors in mind when designing the interiors of the offices in the office building. We equipped every office with the most advanced machines and voice control devices. We also used modern moldings when decorating the offices. The combination of natural materials with different textures allowed me to create impressive offices at a comparatively low cost. The natural materials fill the offices with warmth and coziness while the unsmooth surfaces save them from looking dull and flat. We put a mirror in every office too. According to Fen Shui, a tall mirror in the room suppresses negative energy and enhances positive energy that spreads all around the office. We paid great attention to the lighting of the offices as well. If an office space

is lit poorly, the occupants will feel apathetic and unwilling to work. Generally speaking, the lighting in the office has a great impact on the officers' emotional and physiological state. If there is not enough light in the room, the occupants will feel sleepy. If the lights are too bright, the officer will feel irritated and distracted from their work duties. The wrong placement of the sources of light will hamper concentration. So, it was important to find the "golden mean" to let the officers feel comfortable at work. I suggested installing adjustable lighting systems in the offices. A voice-activated digital assistant can change the intensity of the lighting and its color. Besides, the officers can use their smart phones to control the lights as they find appropriate. In addition to that, there are presence sensors that automatically turn the lights on and off thus providing for an economical use of electricity. Finally, we divided the offices in two 'light zones': the working areas are well lit while the light is dimmer in the coffee-break zones.

I used my expertise in the principles of ergonomics and my knowledge of the effects of interior elements on human psychology to create perfect offices. The occupants now feel much less stressed thanks to the interior decorations that I introduced. Because the offices look much nicer than they did before, the number of companies wanting to rent them is growing. Consequently, the profits of the business center owner are growing too. Practice shows that the emotional state of the worker has a considerable impact on their performance. Attractive interior decorations put the occupants in a good mood and they work more efficiently thus making more money for their employers. As a result, the employers can afford renting a nice office in the center of a large city. Companies renting offices in the business center that I am talking about here are highly productive (Pictures 9-14).



Picture 9



Picture 10



Picture 11



Picture 12



Picture 13



Picture 14

Thus, the interior design affects the emotional state of the office occupants. The designer should have a clear understanding of the customer's needs and desires before he or she can make suggestions related to the decoration elements. Today, the designer does not simply sell products or ideas but rather he or she sells emotions. Emotions are a means of communicating with the world, a method of making yourself stand out against the background of your competitors. Maslow pyramid describes the hierarchy of human needs:

- Physiological needs
- Safety needs
- Belongingness and love needs
- Esteem needs
- Self-actualization needs

The pyramid shows that the basic needs have to be satisfied before any higher needs can be satisfied. Namely, the working environment has to be healthy and safe before we can talk about improving the worker's performance in the strife for self-actualization, for example. The pyramid is thus applicable to the area of interior design. The designer has to satisfy the office occupant's needs with the help of visual and tactile instruments. This fact has probably promoted the emergence of a new term in the design industry: "Emotional Design". It is not quite clear for many people (especially from other areas of specialization) what the principles of emotional design are and what the term actually means. I hope that I have been able to show that the term is perfectly applicable to the case that I have described above.

The term 'emotional design' was introduced by Don Norman, a co-founder of Nielsen Norman Group, in the 1980s. His books *Design of Everyday Things* and *Emotional Design* have been reprinted several times and they are still popular today. The book *Designing for Emotion* by Aaron Walter came out a bit later but it generally promotes the same ideas. The term 'emotional design' is applicable to those cases when the interior decorations provoke positive emotions and help to overcome stress. This is more than just a flawless design. The main principle that lies at the very foundation of emotional design is as follows: the space has to make the occupant feel happier.

In conclusion, I would like to re-emphasize the fact that the current situation in the world is causing depression and stress in a great number of people which leads to decreased productivity. Serious efforts are required to reverse the situation. We can achieve great results if specialists

from different areas work together to solve the problem. The designer in particular plays a crucial role in the process. He or she needs to adapt to the new reality and acquire knowledge in architecture and psychology. The latter field of study helps the designer better understand the clients' needs and 'read' their behavior. Thanks to extensive research, today we have an understanding of how various design elements affect human psyche. Thus, we have a chance to suggest interior design solutions that are not only aesthetically attractive but also beneficial in terms of alleviating the feeling of stress.

I believe it is important to reconsider the image of interior design (as a field of study) because it is wrong at the moment. Interior design is generally thought of as a form of art but in fact, it is an area that helps achieve socially important goals. If only a small number of psychologists and designers understand the extent of the positive impact on human psychology that interior decorations can have, we are not going to see the end of the 'thoughtless interior design' era. On the other hand, if the general public is aware of it, we will have a better chance to improve the world that we live in.

I believe that I must come up with interior design solutions that help to achieve one of the following goals: to eliminate or, on the contrary, to promote certain emotional and psychological states in the occupants of the room. So, I'm going to keep on moving in this direction.

References

1. Deineka OS, Maksimenko AA. Otzenka psikhologicheskogo sostoyaniya obshchestva v usloviyah infodemii posredstvom analiza sotsialnyh setey: obzor zarubezhnyh publikatsiy [Electronic source]. Obshchestvo. Sreda. Razvitiye. 2020;2:28-39. Available from: <https://cyberleninka.ru/article/n/otsenka-psikhologicheskogo-sostoyaniya-obshchestva-v-usloviyah-infodemii-posredstvom-analiza-sotsialnyh-setey-obzor-zarubezhnyh>
2. dos Santos Oliveira SJG, et al. Anxiety, depression, and quality of life in mothers of newborns with microcephaly and presumed congenital Zika virus infection. Archives of women's mental health. 2016;19(6):1149-1151. DOI: 10.1007/s00737-016-0654-0
3. Guan WJ, Ni ZY, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. N Engl J Med 2020.
4. Internet source: https://m-strana.ru/design/tsvet-sten-vofise/?utm_source=copy&utm_medium=direct&utm_campaign=copy_from_site
5. Internet source: <https://naikom.ru/blog/archives/6382>
6. Internet source: <https://zsrfr.ru/blogpost/247/arhitektura-i-psihologija>

7. James PB, et al. Post-Ebola psychosocial experiences and coping mechanisms among Ebola survivors: a systematic review. *Tropical Medicine and International Health*. 2019;24(6):671-691. DOI: 10.1111/tmi.13226
8. Kochetova YuA, Klimakova MV. Emotsional'nyi intellekt i agressiya v zarubezhnykh issledovaniyakh. *Sovremennaya zarubezhnaya psikhologiya = Journal of Modern Foreign Psychology*. 2019;8(3):29-36. DOI: 10.17759/jmfp.2019080303 (In Russ.).
9. Li O, Guan X, Wu P, et al. Early Transmission Dynamics in Wuhan, China, of Novel CoronavirusInfected Pneumonia. *N Engl J Med* 2020.
10. *The Lancet*. 2020;6.
11. Tang X, Wu C, Li X, et al. On the origin and continuing evolution of SARS-Co V-2. *National Science Review* 2020.
12. Walter A. *Designing for emotion. A Book Apart*, 2020. 107 p. ISBN 978-1-937557-93-5
13. Wang Y, Di Y, Ye J, Wei W. Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of china. *Psychology, Health & Medicine*. Published online: 30 Mar. 2020. DOI: <https://doi.org/10.1080/13548506.2020.1746817>

Abstract. Inclusive design that combines emotional empathy and interaction with all users. Accessibility is considered an essential element of architectural design practice. However, research shows that the adoption of inclusive design into design practice is still quite limited.

Keywords: Inclusive design, empathy, accessible

The first international document dedicated to the standards of the rights of people with disabilities was adopted in 2011 - this is the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) [1].

Advances in medicine in the 20th century have led to an increase in the likelihood of survival after injury or illness, and to an increase in the life expectancy of people with severe health problems. Back in the early 20th century, the disabled and the elderly were a minority of the population. The average life expectancy of a person was only 47 years, and the chances of survival in people who received severe injuries were only 10%. In addition, after two world wars, antibiotics and other medical advances have kept a large number of injured soldiers alive. These demographic changes have led to an aging and disability population [2].

The civil rights movement of the 1960s inspired the subsequent Disability Rights Movement, and had a strong influence on legislation [3]. The new laws prohibited discrimination against people with disabilities and provided access to education, public facilities and transportation.

In response to the demands of disabled veterans and disability advocates, a process has begun to change public policy and design practices to create educational and employment opportunities. Physical barriers in the environment have been recognized as the primary barriers for people with mobility impairments.

In general, all this has led to the highlighting of the rights and needs of older people and people with disabilities. To which the governments of various states responded by introducing anti-discrimination laws.

The World Health Organization (WHO) recognized in 2011 that “Disability is part of the human condition” and this has become important in understanding disability. Society has long viewed physical or cognitive impairment as a medical problem that needs to be addressed. This medical approach calls for treatment and, if that fails, for charity, which has

often led to the institutionalization of people with disabilities. Today, the medical model of disability and the social model of disability are combined. The unified model recognizes the role that the environment, both physical and behavioral, plays in how people experience physical or cognitive impairment.

Designers responded to the social movements of the 20th century with deliberate efforts. The term barrier-free design was first used in the 1950s to describe efforts to remove physical barriers from the “built environment” for people with disabilities. Barrier-free design solves the problem of access. But this design is not meant for everyone. It has a focus on disability and the adjustment of people with disabilities to the physical environment. Sometimes the term “accessible design” is used instead of the term “accessibility design”.

Since the advocates of barrier-free design and architectural accessibility began to fight to meet the general needs of people with disabilities, it became clear that certain accessibility features were “special”, more expensive and usually ugly. Many accessibility elements are extensions to other structures, such as ramps or elevators. These extensions required a redesign and additional costs. And they often isolated those with physical problems from the rest of the people. This approach to accessibility is unfortunate.

It is clear that many of the changes needed for people with disabilities have actually benefited everyone. The recognition that many of these features could be provided ubiquitously and therefore be less expensive, attractive, and even marketable set the stage for the universal design movement. The term “universal design” was coined in 1985 by Ronald Mays to mean “the design of products and environments that can be used by all people without adaptation or special design.” Universal design is an approach to designing the built environment with the understanding that a building will be used by a wide range of people with different physical, sensory and cognitive abilities. It is important to understand what universal design is, how to apply it in practice and how it differs from accessible design.

Barrier-free design is an approach to building that takes into account the needs of people with disabilities. Barrier-free design elements include items such as wooden or metal ramps leading to exterior doors, widened hallways that can accommodate wheelchairs, and lower table tops to facilitate wheelchair access.

The universal design is not only suitable for people with disabilities, but also suitable for people with any ability level. The universal design

is aesthetically comfortable for people of different heights, physical and mental abilities. For example, stepless inputs and automatic water mixers. Barrier-free and universal design have different goals, different approaches to architecture, but both support the accessibility, aesthetics, functionality and convenience of buildings. Some designers use the term “inclusive design” instead of “universal design”, or human-centered design that recognizes human diversity, physical and otherwise. However, there is a subtle difference between these concepts.

Universal design is design that makes an architectural solution easy to use and accessible to as many users as possible, regardless of ability, disability, age or gender. Universal design caters to the widest possible range of users rather than trying to address individual accessibility or inclusion issues. Typically, a universal design does not provide additional support for “edge cases”, but instead provides a single solution that caters to the widest possible user base without additional fixtures.

In 1994, Roger Coleman coined the term “inclusive design”. Inclusive design initially focused on the needs of an aging population. But then it was extended to people with disabilities. Then came the understanding that all people have their own unique characteristics. And they must be taken into account when designing. Inclusive design involved interacting with all users and developing empathy for their needs.

Inclusive design involves as many people as possible who suffer from isolation. Inclusive design considers the diverse experiences of people in order to comfortably use the results of design. Inclusive design is more of a design methodology or ideology than a list of specific requirements to be met. In contrast to accessibility and universal design, inclusive design is focused on a continuous process and repetition of the process in order to create a sequence of results [4].

The theme of inclusive architecture may seem rather simple at first glance. However, understanding the concept and how to actually create an inclusive space can be quite tricky. Designing truly inclusive spaces can be quite a challenge. This challenge involves many different aspects of architecture, engineering and urban design, a solution for every single obstacle that a given space can create, keeping each vulnerable population in mind [5]. The main goal is to create an environment accessible to as many people as possible, regardless of age, gender and disability. To achieve this goal, it is necessary to follow the principles of inclusive design.

Exclusion points

Active search for points of exclusion from the design results of certain users, and generation of new ideas and new solutions for them.

Understanding how and why people are excluded can help develop concrete steps towards greater openness.

Situational problem

An exception may occur depending on the situation. It is necessary to understand how the user interacts with the design product, and to adjust the design so that it is available at these moments of exception.

Recognition of personal bias

Involving people from different communities in the process of research, design and testing. Users will help identify and test any assumptions and biases. People will not only point out their needs, but also help to go beyond our own abilities and design biases.

Different ways of interaction

Offering people different ways to interact with the design product. With a variety of options, users can choose the solution that best suits them.

Similar experience

When designing different ways for people to interact, you need to make sure that their life experiences and skills are comparable. Compliance with accessibility standards does not necessarily guarantee usability or comparable skills.

Solution for everyone

Developing a solution for one group of users can benefit a much wider audience.

Empathy

Inclusive design starts with creating a design team that can empathize with disadvantaged users. Designers must intuitively understand the interaction with the environment of users with special needs. Empathy, a sense of belonging, rather than a sense of exclusion, is important here. Empathy is the ability to read another person's emotional state and measure it against one's own thoughts and actions.

This is the perception of the world from the point of view of another person, this is the ability to put yourself in the place of another in order to feel what he can feel. This is empathy with the emotional state of another person without losing a sense of the origin of this experience.

Inclusive design goes beyond accessibility solutions that target users with special needs or disabilities. While accessible design separates users according to their strengths and weaknesses, inclusive design caters to everyone, regardless of ability. Inclusive design takes into account both permanent and temporary disruptions. The goal of inclusive de-

sign is to offer the same technology to all users, with or without special needs.

In practice, the empathic approach to architecture is not very common. The reason lies in the internal conflict of architects. The whole educational system of architects is to find the most functional and aesthetic design of the building. The dominant values in the minds of many designers and architects are originality and creativity. This results in many architectural decisions being made based on experience, advice, or intuition, rather than decisions explained by human response to design products. Stereotypes and prejudices about human physical and cognitive abilities are present in many projects [6].

It is necessary to rethink the training of architects and designers so that they begin to think of architecture not only as a discipline, but also as a cultural project. In architecture, this means designing spaces, buildings, urban spaces, and cities with the needs and desires of occupants in mind, giving occupants control over the design of their own environment, and respecting occupants' views of their own environment. The evolution of architecture is only possible through the spread of architectural empathy and understanding of inclusion, when the designer puts himself in the role of the future occupant and tests the correctness of ideas through this imaginary exchange of roles and personalities.

Inclusive design principles put people first. It is about designing for the needs of people with permanent, temporary, situational or changing disabilities. For all people.

References

1. Andrew S. What is Inclusive Design and how can it achieve a built environment to be enjoyed by everyone? Discussion Report arising from the November 200 Disability Rights Commissions Round Table Discussion on Inclusive Design, 2002
2. Lifchez, R. Rethinking Architecture: Design Students and Physically Disabled People. Berkeley, California, University of California Press, 1986.
3. Goeritz M. ¿Arquitectura Emocional? *Arquitectura*, No. 8-9, Mexico City, pp.17-22, 1960
4. May M. The Same, But Different: Breaking Down Accessibility, Universality, and Inclusion in Design. *Adobe Blog*, April 2, 2018. Retrieved August 10, 2019.
5. Moreira da Silva F., Almendra R. Inclusive Design: A New Approach to Design Project. A Portrait of State-of-the-Art Research at the Technical University of Lisbon, pp. 605–621, 2007
6. Sandman H. Empathy Matters: architecture for the world's majority. p. 147, 2021

Notes on contributors

Univ.a.Prof. **Elena Alekseeva**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: integrated teaching of Mari and Russian literacy for preschool children; multicultural education. More than 30 publications. ORCID <http://orcid.org/0000-0002-1078-2873>, SCOPUS ID: 57202537214, elena_vitaliev@mail.ru

Univ.a.Prof. **Julia Anisimova**, PhD. in Psychology, Naberezhnye Chelny State Pedagogical University. Scientific interests: systemic personality traits, including hard work of students, volitional qualities of athletes, psychological characteristics of adolescence, issues of motivation and self-realization of students. ORCID <http://orcid.org/0000-0002-7445-3729>, yulya-vedernikova@yandex.ru

Univ.a.Prof. **Aiman Azmukhanova**, Dr.Sc. in History, L.N. Gumilyov Eurasian National University. Scholarship holder of the international program of the President “Bolashak” in the specialty: Pedagogical diagnostics, assessment and quality management of education, MSB (Montreux, Switzerland), leading lecturer of the Faculty of International Relations. She has experience in research on history, international relations of Kazakhstan with foreign countries, the international image of the Republic of Kazakhstan. Published in national and international scientific journals indexed in Web of Science and Scopus. ORCID <http://orcid.org/0000-0001-9535-7851>, SCOPUS ID 57192914101, aiaz67@mail.ru

Univ.Prof. PaedDr. **Miroslava Bartoňová**, PhD., Comenius University Bratislava. Scientific interests: The focus of specific learning disabilities - education, diagnosis, intervention, counselling; inclusive education and inclusive didactics; didactic approaches to pupils with learning disabilities; education and intervention of pupils with mild mental disabilities. bartonova@fedu.uniba.sk

Univ.a.Prof. Ph.Dr. **Alexandra Biščo Kastelová**, PhD, Comenius University Bratislava. Scientific interests: special education, special educational diagnostics, counselling for individuals with SEN, comparative special education. ORCID <https://orcid.org/0000-0001-8068-5510>, kastelova@fedu.uniba.sk

Univ.a.Prof. **Elena Borisova**, PhD in Psychology, Mari State University. Scientific interests: psychological and pedagogical support for children with disabilities, psychological assistance technologies. Grantee of RFBR 2014-2015, 2016-2017, 2018-2020. ORCID <https://orcid.org/0000-0003-0354-572X>, SCOPUS ID 56609913700, elenaborpsy@yandex.ru

Ondrej Čapák, MA in Special Education, Comenius University Bratislava. Scientific interests: education of pupil with intellectual disability. capak2@uniba.sk

Michaela Čapáková, MA in Special Education, Comenius University Bratislava. Scientific interests: special education, intellectual disability. capak2@uniba.sk

Univ.a.Prof. **Natalia Chaldyshkina**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: socio-pedagogical activity, socio-pedagogical rehabilitation of children with disabilities, spiritual and moral education and development of children and youth, the pedagogical potential of social networks, self-development and self-organization of personality, film pedagogy. Published 3 monographs, 6 educational publications, 219 scientific articles, received 3 certificates from the Federal Service for Intellectual Property. Grantee of 5 grants: 1 as a grant project manager and 4 grants as a researcher. ORCID <https://orcid.org/0000-0003-4525-7056>, chaldyshkina_n_n@mail.ru

Univ.a.Prof. **Iryna Desnova**, PhD in Pedagogy, Vinnytsia Mykhailo Kotsubynskyi State Pedagogical University. Scientific interests: preschool education. ORCID <https://orcid.org/0000-0001-5130-079X>, desnova.iri-na@vspu.edu.ua

Univ.a.Prof. **Svetlana Domracheva**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: social interaction, psychology, mediation, digital technologies. Grantee of TEMPUS 2013-2017, RFBR 2019-2021, Inopolis University Grant 2021. ORCID <https://orcid.org/0000-0001-7133-9579>, domrachevamargu@gmail.com

Univ.a.Prof. **Irina Dremina**, Dr.Sc. in Psychology, Mari State University. Scientific interests: psychological counselling, psychotherapeutic methods of psychological assistance, developing the professional compe-

tences of psychology students, technologies for teaching psychological counseling. More than 70 publications. ORCID <https://orcid.org/0000-0002-1990-6473>, irina_dremina@mail.ru

Mag. **Aksar Eltemerov**, State Fire Academy of EMERCOM of Russia. Scientific interests: digitalization and transformation of education, patriotic education, higher education. ORCID <https://orcid.org/0000-0001-7839-5039>, SCOPUS ID AAK-2370-2020, aksarus@mail.ru

Mag. **Lina Embacher**, Institute for intellectual integrations. Scientific interests: integration education, international education, German language teaching technologies. ORCID: <https://orcid.org/0000-0002-9821-5813>, vasilinaembacher@gmx.at

Dilyara Farshatova, master's student, Kazan Federal University. Scientific interests: education management technologies. ORCID: <https://orcid.org/0000-0002-2391-8071>, dilyara.farshatova@mail.ru

Univ.Prof. **Svetlana Fedorova**, Dr.Dr.Sc. in Pedagogy, Mari State University. Scientific interests: ethnopedagogy, ethnocultural competence of a teacher, psychological and pedagogical research in preschool education, digital transformation in education, methodology and technology of professional education. ORCID <https://orcid.org/0000-0001-8163-8273>, SCOPUS ID 57142056500, svetfed65@rambler.ru

Mag. **Natalia Golikova**, Mari State University. Scientific interests: theory and methodology of vocational education, digital transformations in education, educational consulting. ORCID <https://orcid.org/0000-0002-7426-3925>, ndgolikova@yandex.ru

Univ.a.Prof. **Svetlana Grunina**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: Aesthetic education and artistic development of preschool children, methods of training future teachers of the system of preschool education at the university. ORCID <https://orcid.org/0000-0003-1552-0933>, grunina_s_o@mail.ru

Univ.a.Prof. PaedDr. **Terézia Harčariková**, PhD, Comenius University Bratislava, completed her studies in special pedagogy – specializing in pedagogy for the physically and physically handicapped and teaching

special education subjects: Slovak language and literature. Since 1997 she has been working at the Department of Special Education, Faculty of Education, Comenius University in Bratislava. She deals with the issue of pedagogy of the physically handicapped, sick and handicapped at the theoretical, research and praxeological level. She is the author of several monographs and teaching texts on this issue. ORCID <https://orcid.org/0000-0002-9749-9754>, harcarikova@fedu.uniba.sk

Mona Hillis, BA, Master's student, Comenius University Bratislava.

Univ.a.Prof. **Oksana Holiuk**, PhD in Pedagogy, Vinnytsia Mykhailo Kotsubynskyi State Pedagogical University. Scientific interests: preschool education. ORCID <https://orcid.org/0000-0001-6309-9261>, SCOPUS ID 57210208962, oksana.holiuk@vspu.edu.ua

Mag. **Daria Ivanova**, Mari State University. Scientific interests: digitalization and transformation of education, patriotic education, higher education. ORCID <https://orcid.org/0000-0002-8101-7458>, SCOPUS ID AAK-2668-2020, d_a_f_f_k_a@mail.ru

Mgr. **Zuzana Ivanová**, PhD Student, Comenius University Bratislava. She completed her bachelor's and master's studies at the Department of Special Education, Faculty of Education, Comenius University in Bratislava. The subject of her interest is the issue of individuals with physical disabilities, illness, and impairment. She currently works as a doctoral student at the Department of Special Education, Faculty of Education, Comenius University in Bratislava, and in her doctoral thesis she deals with the issue of cured individuals with cancer. In his pedagogical activities he focuses on the issue of individuals with physical and multiple disabilities. ORCID: <https://orcid.org/0000-0002-2631-1750>, ivanova@fedu.uniba.sk

Univ.Prof. **Elena Kartashova**, Dr.Dr.Sc. in Philology, Mari State University. Scientific interests: stylistics of the Russian language, History of the Russian literary language, Modern paradigms of text research (cognitive linguistics, semiotics, linguoculturology, philological analysis of text), Intercultural communication. ORCID <https://orcid.org/0000-0001-9393-9436>, SCOPUS ID: 56530557900, elena.karta77@mail.ru

JUDr. **Marta Kečkěšová**, PhD, Comenius University Bratislava. Scientific interests: research and pedagogical activities from selected field of special pedagogy, authorship and co-authorship in outputs from publication activity. keckesova@fedu.uniba.sk

Mag. **Katarína Kelemenová**, PhD student, Comenius University Bratislava. Scientific interests: cystic fibrosis as an incurable and life-limiting illness, consequences of this illness that have a significant impact on the quality of life of the individual with this illness and his family. kelemenova31@uniba.sk

Univ.a.Prof. **Rezida Khusnutdinova**, PhD. in Psychology, Naberezhnye Chelny State Pedagogical University. Scientific interests: phenomenon of childhood, adolescent subcultures, youth, multicultural methods and techniques, psycho-correctional work, impulsive children. More than 60 publications. ORCID <http://orcid.org/0000-0002-7464-1930>, rezida.81@mail.ru

Univ.a.Prof. **Lyubov Komarova**, Dr.Sc. in Psychology, Kazan Federal University. Scientific interests: inclusion, special psychology and pedagogy. ORCID: <https://orcid.org/0000-0002-2746-8178>, SCOPUS ID: 57191418384, luba7575@mail.ru

Univ.Prof. **Elena Kondratenko**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: pedagogy and psychology of higher education, education management, training of teachers. Supervisor of graduate students, head of the federal innovation platform, grants participator. ORCID <https://orcid.org/0000-0003-1914-0487>, SCOPUS ID 56609930700, kondratenko12@mail.ru

Univ.a.Prof. **Elena Konovalova**, Dr.Sc. in Pedagogy, Naberezhnye Chelny State Pedagogical University. Scientific interests: social psychology, general psychology, communication psychology, practical psychology for children. More than 40 publications. ORCID ID: <https://orcid.org/0000-0002-7464-1930>, ele4621@yandex.ru

Mag. **Natalya Kornilova**, postgraduate student, Mari State University. Scientific interests: ethnocultural educational practices, ethnocultural educational practices means of familiarizing children with their nation-

al culture. Published 1 monograph, 3 scientific articles. ORCID <https://orcid.org/0000-0003-4890-0772>, kornilovanataleks75@mail.ru

Univ.a.Prof. **Irina Kozina**, PhD in Pedagogy, Mari State University. Scientific interests: educating children with developmental disabilities. Grantee of RFBR 2014-2015, 2016-2017, 2018-2020. ORCID <https://orcid.org/0000-0002-4871-1835>, kozira@list.ru

Univ.Prof. **Kateryna Kruty**, Dr.Dr.Sc. in Pedagogy, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University. Scientific interests: preschool education. ORCID <https://orcid.org/0000-0001-5001-2331>, SCOPUS ID 57211396974, kateryna.krutii@vspu.edu.ua

Univ.a.Prof. **Sergei Lavrentiev**, PhD in Pedagogy, Mari State University. Head of master's programs "Consulting in the system of vocational education" and "Innovations in vocational education". The results of research activities received support in the form of grant-funded projects. Research work is carried out in the following areas: writing and preparation for publication of monographs; writing and preparation for publication of scientific articles in journals included in the Scopus database; writing and preparation for publication of scientific articles in publications of the Higher Attestation Commission and foreign journals; preparation and submission of applications for participation in competitions for grants, funded topics; management of research work of students. ORCID <https://orcid.org/0000-0001-6518-0020>, Scopus ID: 56530809500, lavrsu@mail.ru

Univ.a.Prof. **Galiya Ldokova**, PhD in Psychology, Kazan Federal University. Scientific interests: digital educational technologies, children with writing disorders, the problem of asynchronism of cognitive processes and emotional intelligence. ORCID ID: <https://orcid.org/0000-0003-3527-8574>, Scopus ID 55801780800, ldokovagal@yandex.ru

Univ.a.Prof. PaedDr. **Jana Lopúchová**, PhD, Comenius University Bratislava. Her field of expertise is special pedagogy, with focus on the pedagogy of the visually impaired. She participates in scientific research and publishing activities, which include more than 200 published outputs, seven monographs in authorship or co-authorship (including one international), authoring one domestic university textbook, co-authoring

of four international university textbooks and scientific and research studies and contribution outputs. She completed two KEGA projects financed by the Ministry of Education of the Slovak Republic as the main researcher and was a co-researcher in 14 other projects (VEGA, KEGA, ESF, UK, etc.). An expert in the field, she registers more than ten local and foreign lectures by invitation. She has actively participated in more than thirty scientific domestic and international conferences. ORCID: <https://orcid.org/0000-0002-2951-4342>, lopuchova@fedu.uniba.sk

Univ.Prof. **Natalya Martishina**, Dr.Dr. in Philosophy, Siberian Transport University. She is Professor, Head of the Department of Philosophy and Cultural Studies. ORCID: <https://orcid.org/0000-0001-6402-443X>, nmartishina@yandex.ru

Univ.Prof. **Elena Merzon**, Dr.Sc. in Pedagogy, Kazan Federal University. Scientific interests: pedagogy of higher education, education management, international education. ORCID: <http://orcid.org/0000-0001-7708-2946>, Scopus ID: 55931033300, elena.merzon@kpfu.ru

Mag. **Lenka Nadányi**, PhD student, Comenius University Bratislava. Scientific interests: children diagnosed with autism spectrum disorders which are in preschool age, research in education and special-educational interventions. She has some publications in scientific conferences proceedings. ORCID <https://orcid.org/0000-0002-1580-6053>, nadanyi@fedu.uniba.sk

Univ.a.Prof. **Irina Nigmatullina**, PhD in Education, Kazan Federal University. ORCID <https://orcid.org/0000-0001-6151-6164>, irinigma@mail.ru

Irina Nikolaeva, MA in Architecture, Kazan State Architecture and Construction University. She is a professional interior designer, the founder and the head of DesignWorld studio, a member of the RF Designers' Association, a member of the Tatar Architects, Designers, and Decorators' Guild. irina_etc@mail.ru

Mag. **Anna Novikova**, postgraduate student, Mari State University. Scientific interests: psychological and pedagogical research in education, digital transformations in education, educational consulting. ORCID <https://orcid.org/0000-0002-6071-3614>, novikova_anika@mail.ru

Univ.a.Prof. **Saniya Nurdavletova**, Dr.Sc. in History, L.N. Gumilyov Eurasian National University. Scientific interests: development of research universities, soft power methods applied in central asian countries, terrorism as a cross-border or trans-national phenomenon. Published in national and international scientific journals indexed in Web of Science and Scopus. ORCID <http://orcid.org/0000-0003-1826-7398>, SCOPUS ID 57203994578, saniyanm83@mail.ru

Mag. **Žofia Ondráčková**, Comenius University Bratislava. Scientific interests: inclusion and integration, orientation and mobility of seniors with visual impairment.

PaedDr. **Margaréta Osvaldová**, PhD, Comenius University Bratislava. Scientific interests: music educational and therapeutic impact on people with disability, music art education as a means of inclusion of pupils with special needs. ORCID <https://orcid.org/0000-0002-4031-4472>, osvaldova@fedu.uniba.sk

Alina Pardaeva, master's student, Kazan Federal University. Scientific interests: education management technologies. ORCID <https://orcid.org/0000-0001-9659-1340>, alino4ka1009@inbox.ru

Univ.a.Prof. **Olga Petuchova**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: aesthetic education and artistic development of preschool children, methods of training future teachers of the system of preschool education at the university. ORCID <https://orcid.org/0000-0002-4717-4265>, SCOPUS ID 57198344501, art-ga@mail.ru

Univ.a.Prof. **Ekaterina Plotnikova**, PhD in Philology, Mari State University. Scientific interests: Russian language and speech culture, Russian as a foreign language, Modern culture and literature, New information technologies in education. ORCID <https://orcid.org/0000-0002-7798-5237>, SCOPUS ID: 7198431104, kati_miracle@mail.ru

Prof. **Oskar Raif. Riabov**, PhD in Psychology, Institute for intellectual integrations. His research interests focus on the psychology of behavioural security from a dissynchrony perspective, the human impact of high-tech factors and environments, sustainable regional development and scientific methods for managing international and regional strat-

egies for educational development. ORCID: <http://orcid.org/0000-0002-5556-081X>, office@rbs-ife.at

Mag. **Konstantin Ryabov**, Institute for intellectual integrations, office@rbs-ife.at

Univ.a.Prof. **Elvira Sadretdinova**, PhD in Education, Kazan Federal University, Kindergarten KFU “WE ARE TOGETHER”. ORCID <https://orcid.org/0000-0001-8808-6205>, ellsah@bk.ru

Samba Anna, researcher, Federal Research Sociological Center of the Russian Academy of Sciences, Moscow. Professional interests is psychology of communication, psychological actions, emotional intelligence, system-activity approach. ORCID: <https://orcid.org/0000-0001-6525-2442>, sundui2012@yandex.ru

Mag. **Dina Semenova**, Mari State University. Research Interests focused on the digitalization of education, using network technologies in education, the creation and implementation of online courses, project activities. Author of more than 30 scientific and teaching papers. ORCID: <https://orcid.org/0000-0002-7892-3003>, SCOPUS ID 57221312937, dinasemenova@gmail.com

Univ.a.Prof. **Olga Shestakova**, Dr.Sc. in Philology, Mari State University. Scientific interests: foreign languages teaching for pre-school children, sociolinguistics, comparative linguistics, development of professional competences of intending teachers. Published 6 educational publications, 35 scientific articles. ORCID <https://orcid.org/0000-0002-8130-4713>, SCOPUS ID 56610311400, shobor@bk.ru

Mag. **Anna Shpak**, Mari State University. Research Interests focused on the innovative pedagogical technologies, instructional design and the use of mobile technologies in education, creation and implementation of online courses, project management. Grantee of international and regional funds. Author of 20 scientific and teaching papers. ORCID: <https://orcid.org/0000-0001-8798-8610>, annaevgshpak@gmail.com

Univ.a.Prof. **Olga Shterts**, PhD in Psychology, Kazan Federal University. Scientific interests: development of giftedness of children and youth,

psychological and pedagogical support for children with speech impairment, personality resilience. Grantee of TR Academy of sciences 2013, Open University of talents 2017, Presidential Grants Fund 2019-2020. ORCID <https://orcid.org/0000-0002-6584-7478>, Scopus ID 55930367300, olgashterz@mail.ru

Univ.a.Prof. **Oleksandra Shykyrynska**, PhD in Pedagogy, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University. Scientific interests: preschool education. ORCID <https://orcid.org/0000-0001-6507-341X>, oleksandra.shykyrynska@vspu.edu.ua

Univ.Prof. **Irene Sibgatullina-Denis**, Dr.Dr.Sc. in Psychology, Institute for intellectual integrations, Comenius University Bratislava. She researches the phenomenon of dyssynchrony in mental development and psychosocial dyssynchrony. Her research interests are: scientific methods of international and regional education development strategies management, benchmarking and asynchrony technologies in international project management, informal human capital preservation technologies and regional talent management models. ORCID: <http://orcid.org/0000-0001-5149-6139>, Researcher ID: E-1795-2019, SCOPUS ID: 57219597703, office@rbs-ife.at

PaedDr. **Dorota Smetanová**, PhD, Comenius University Bratislava. Scientific interests: research and pedagogical activities from selected field special and social pedagogy. It examines the issue of behavioral disorders and sexuality and intimacy aimed at children and adolescents. ORCID <https://orcid.org/0000-0002-3987-2637>, smetanova@fedu.uniba.sk

Mag. **Nikoletta Szászová**, PhD student, Comenius University Bratislava. She is PhD student in special education and her research interest is focusing on problems of neuroeducation a neuropedagogy in special education. bottyanova@fedu.uniba.sk

Univ.a.Prof. **Elena Taskaeva**, Dr.Sc. in Philosophy, Siberian Transport University. She is is an Associate Professor at the Department of English Language. ORCID: <https://orcid.org/0000-0001-6792-1654>, eltask@mail.ru

Oksana Tatarinova, MA in Pedagogy, Kazan Federal University. Scientific interests: development of gifted children, education management technologies, management of education projects for gifted children . ORCID <https://orcid.org/0000-0003-2804-2803>, oksatarinova@yandex.ru

Mag. **Lane Teriaeva-Maerz**, MA in Pedagogy and Psychology, Institute for intellectual integrations. She researches the phenomenon of mental development dyssynchrony, international and regional strategies for educational development, and the acmeological determinants of pedagogical giftedness. She is interested in management of postgraduate education projects, information technologies for preserving human capital. ORCID: <https://orcid.org/0000-0001-9467-4759>, lane.maerz@gmail.com

Mag. **Miroslava Tomášková**, PhD, Comenius University Bratislava. Scientific interests: music educational and therapeutic impact on people with disability, music art education as a means of inclusion of pupils with special needs. ORCID <https://orcid.org/0000-0002-9983-6304>, miroslava.tomaskova@fedu.uniba.sk

Mag. **Kristína Tkáčová**, PhD, Comenius University Bratislava. She completed her bachelor's, master's, and doctoral studies at Comenius University in Bratislava, at the Faculty of Education, Department of Special Education. The subject of her interest is the issue of individuals with physical disabilities, illness, and impairment. In her doctoral thesis, she focused on the specific issue of terminally ill individuals. In his pedagogical-research activity he focuses on the issue of terminally ill people, she also deals with counselling activities – grief therapy for children and adolescents. ORCID <https://orcid.org/0000-0003-4583-2014>, kristina.nagyova@fedu.uniba.sk

Univ.a.Prof. **Vera Toktarova**, Dr.Sc. in Pedagogy, Mari State University. Research Interests focused on the strategy of digitalization of education, innovative pedagogical technologies, instructional design and the development of adaptive eLearning systems, creation and implementation of online courses, project management. Grantee of international and regional funds. Author of 210 scientific and teaching articles. ORCID: <https://orcid.org/0000-0002-3590-3053>, SCOPUS ID 56610266600, toktarova@yandex.ru

Ilya Ushakov, master's student, Kazan Federal University. Scientific interests: education management technologies, education project management. ilya.uschakov2013@yandex.ru

Snezhana Ushakova, MA in Pedagogy, Kazan Federal University. Scientific interests: education management technologies, education project management, development of gifted children. ORCID <https://orcid.org/0000-0001-5263-584X>, snejana.osedach@yandex.ru

Univ.Prof. Paed.Dr. **Alica Vančová**, CSc., Comenius University Bratislava. Scientific interests: pedagogical and interdisciplinary intervention for children and people with mental and multiple disabilities, with brain damage, development, and innovation in the field of modern intervention procedures based on the knowledge of neurosciences and their application to special pedagogy. ORCID: <https://orcid.org/0000-0001-6885-4166>, vancova@fedu.uniba.sk

Univ.a.Prof. **Veronika Vasina**, PhD in Education, Kazan Federal University. ORCID <https://orcid.org/0000-0003-4553-6442>, VVVasina@kpfu.ru

Univ.a.Prof. **Elvira Vorontsova**, Dr.Sc. in Pedagogy, Mari State University. Scientific interests: academic work, fundamental medicine. ORCID <http://orcid.org/0000-0001-7768-5915>, SCOPUS ID: 5714211150, vem_77@mail.ru

Univ.a.Prof. **Leysan Zakirova**, Dr.Sc. in Psychology, Kazan Federal University. Scientific interests: inclusion, special psychology and pedagogy, quality of life of people with disabilities. ORCID ID: <https://orcid.org/0000-0003-2918-4424>, SCOPUS ID: 56285595200, drzak@mail.ru

Ivan Zotin, master's student, Kazan Federal University. Scientific interests: education management technologies. zotin2010@gmail.com

© 2022 by IfII Institut für Intellektuelle Integration
© The Editor(s) (if applicable) and The Author(s)

**University and institutional scientific research:
Collective monograph**

ISBN 978-3-200-08879-5 (e-book)

Sibgatullina-Denis I., Vančová A., Blumesberger S., editors.
University and institutional scientific research: Collective monograph.
Vienna: IfII Institut für Intellektuelle Integration, 2022. 472 p.

ISBN 978-3-200-08879-5

