

REVIEW

On a dissertation on a topic:

INDIRECT THERAPY INTERVENTIONS FOR CHILDREN WITH AUTISM SPECTRUM DISORDERS

For the award of the educational and scientific degree "Doctor"
in the professional field 7.4. Public Health

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The review was prepared in accordance with the requirements of the Academic Staff Development Act in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for the conditions and procedure for the acquisition of scientific degrees and the holding of academic positions at New Bulgarian University.

The review of the materials is in accordance with the order of the Rector of the NBU for appointment of the scientific jury No. 3-RK-74/ 29.11.2024.

Tsveta Kamenski has submitted all the necessary documents required for the dissertation defense procedure. The dissertation consists of 175 pages and 29 pages of appendices. The bibliography contains 247 titles in Bulgarian and foreign languages. Structurally, the thesis consists of an introduction, three chapters, conclusions, contributions, conclusion, recommendations, discussion and a list of references used. There are 6 tables, 21 figures and 17 diagrams. The doctoral candidate has submitted four articles on the topic of the dissertation, published in journals included in world scientific databases (Scopus).

Brief presentation of the doctoral student

Tsveta Kamenski graduated with a master's degree in applied Linguistics, specialization in Theory and Practice of Translation (English and French) from the Neofit Rilski University of Science and Technology in 1999. In 2000 she obtained a master's degree in Southeast European Studies at Central European University, Budapest. Since 2023 she has been a Master of Speech Therapy at New Bulgarian University. In 2018, she was enrolled as a full-time PhD student at the NBU, Doctoral Program in Speech Therapy. During her master's studies in Speech Therapy, Tsveta Kamenski participated in the establishment of the Center for the Therapy of Communicative and Emotional-Behavioral Disorders at the NBU, and for many years afterwards she worked as the manager of the center. Since 2018 she is a national consultant on early childhood development at UNICEF-Bulgaria, focusing on working with parents and training programs for parents of children with developmental disorders. In 2020

she created and runs satellite classes for children with autism spectrum disorders (1st to 4th grade) at the Foundation for Educational Transformation. Since 2021, she has been employed at NBU as an assistant professor. Facts that unquestionably demonstrate the professional qualities of PhD student Kamenski and give a statement of high research and scientific application potential.

Without retelling the content of the dissertation, I will put some highlights that I think are important.

Significance of the research problem in scientific and applied terms

Speech therapy professionals are adamant about the place of parents in the overall therapeutic process when working with children with communication disorders. The parent-speech therapist interaction begins from their first meeting, from the first consultation, from the initial working diagnosis. The effectiveness of speech therapy intervention depends on the parent's willingness to accept the clinical diagnosis, their active cooperation and their involvement in the different stages of the therapy program. Acceptance and readiness are related to discussing the causes of the condition and overcoming different parental reactions, such as - arising feelings of guilt or avoiding further information about the etiology and prognosis of the disorder. Often, the establishment of a diagnosis results in a change in the parent-child relationship that is demonstrated by displays of dedication, sacrifice, and overprotection to behaviors of overstimulation leading to negative experiences and frustration. In the field of autism spectrum disorders (ASD), these interactions are even more complex due to the nature of clinical manifestations related to social functioning, emotional connectedness, behavior, verbal and non-verbal communication.

ASD are still an enigma in the context of child development. They have been studied relatively recently and research on them is intensive. The expectation is that their results and findings are yet to be interpreted. In this sense, the choice of PhD student Kamenski to develop an Indirect Intervention Program for the development of language and communication skills in children with ASD, to be conducted at home, by parents, under the supervision of a specialist, is extremely timely and innovative for Bulgarian conditions. Moreover, the implementation of effective therapeutic programs based on evidence from applied research is of significant benefit to modern clinical practice.

Aim and tasks of the dissertation

In relation to the topic, a research question is formulated about the impact of purposeful, structured and active participation of parents of children with ASD in speech therapy intervention and their role in improving communication skills and behavioral functioning. To this end, fully relevant research methods and procedures were defined. The aim and objectives are clearly and specifically stated. The four hypotheses put forward are meaningful and fully fit the purpose.

Degree of knowledge of the state of the problem and consistency of the literature used

PhD student Tsveta Kamenski has an excellent knowledge of both the current state of the issues addressed in the field of ASD and the chronological development of the understanding of disorders in this field. The current World Health Organization (WHO)

classifiers for defining atypical development, namely the International Classification of Diseases (ICD 10, ICD 11) and the International Classification of Functioning, Disability and Health (ICF, 2001), are analyzed, with an emphasis on functional health as a state of complete physical, mental and social well-being rather than simply the absence of disease or infirmity. RAS are also discussed in the context of a recent revision in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V-TR, 2013) of the American Psychiatric Association. This is also the basis on which Kamenski theoretically defines all the major aspects of clinical behavior, with an emphasis on social and behavioral functioning on the one hand, language development, and features of linguistic and para-linguistic means of communication on the other.

I would also like to give special attention to the way etiological hypotheses are presented in the field. With such a controversial and rapidly evolving category of atypical development, Tsveta Kamenski has managed to clearly and comprehensibly structure all existing assumptions about those possible causes that underlie autistic behavior.

The analysis of the importance of parent interventions in working with children on the autism spectrum, as well as the discussion of existing effective parent education and training programs, allows doctoral student Kamenski to argue for a sound theoretical framework for his own applied research.

Correct citation of a representative number of authors

The dissertation correctly cites 247 literature sources in Cyrillic and Latin, in hard copy and electronic format. The authors' selection skills make a very good impression, especially considering the interdisciplinary nature of ASD and the considerable amount of information that can be found on the topic of clinic and therapy in this heterogeneous category of children with atypical development. The most relevant areas are cited, with a skillful presentation of generalizations, own interpretations and conclusions.

The existence of a grounded and fully developed theoretical model of the study

Given the leading deficits in ASD related to social, behavioral, and emotional functioning and their relationship to the development of verbal and nonverbal communication skills, Kamenski, PhD, explored the importance of social communication. The theoretical foundation of her research pursuits is based on Bandura's Social Learning Theory and Vygotsky's Zone of Proximal Development Theory. Thus, the role of parents in the therapeutic process is also deduced.

Tsveta Kamenski skillfully creates a theoretical model of research to include therapeutic achievements in the daily lives of children with ASD; development of their social skills; development of self-care; improvement of parent-child interaction and emotional functioning through shared activities and attention. All these areas are closely related to the development of verbal communication skills.

Relevance of the chosen methodology and research methodology to the purpose and goals of the thesis

The methodology of applied research is fully consistent with the aim and objectives of the dissertation. To validate the diagnosis of the study participants, the CAST parent screening

questionnaire, standardized for Bulgarian conditions, was used. To detect changes in behavior, the CBCL behavioral questionnaire, adapted for use in Bulgaria, was administered at the beginning and at the end of the study.

A significant contribution of the doctoral student is the translation and validation of the FOCUS questionnaire, which allows for the evaluation of therapy on real communication and participation in daily activities in children with communication disorders. The questionnaire is based on the WHO ICF-CY framework for describing human health and related conditions. The tool is particularly valuable not only because it reports on the dynamics of progress and effectiveness of speech therapy intervention, but also because it identifies areas for future therapeutic impact.

The main contribution of the thesis are the results obtained from the developed 12-week author's therapeutic program for indirect intervention for the development of language and communication skills in children with RAS. The program includes various modules for the development of language comprehension, language expression, dialogic speech, the nominative function of language, and language pragmatics. Linguistic stimuli, procedures, conditions and instructions for performance are detailed, specific and comprehensible. The performance supervision program presented makes a very good impression. Important conditions are specified, such as placement in the participants' space; encouragement patterns and support methods; organization of the workspace; rules of communicative behavior; conditions for better parent-child interaction; building communication patterns and motivation for verbal communication with a purpose; forms of shared attention; maintaining the child's commitment to the therapeutic process; quality of language input in terms of form, content, and use; and speech rate and rhythm.

The statistical methods of analysis and inference applied clearly show significant results in the development areas studied and prove the effectiveness of the program. A significant result was the improvement of pragmatic language skills in 71% of the study participants. Most significant was the positive impact on language decoding in 81% of cases. Results that favor improved implicit knowledge of conventional language units. We could assume that this increased capacity of linguistic competence will have its beneficial influence on language expression and the ability to generate own language utterances in the future. Evidence for this is the dynamics of speaking proficiency, which has a significant difference ($p < 0.001$) between entry and exit levels.

Another important result was the significant improvement found in the area of emotional functioning at a value of $p < 0.001$. A result that strongly indicates the effectiveness of the program on parent-child relationship dynamics and their significance in improving overall well-being. High values were also recorded in problem areas of functioning such as social play, independence and coping with challenges.

The summarized results of the evaluation of the effectiveness of the implemented program prove that the improved social skills, emotional reactions and behavior influence the communication and language development of children with ASD. I believe that this is the most significant finding of the study. The indirect intervention program presented for language and communication skills development is an evidence-based practice and allows for objective measurement of the effectiveness of speech therapy interventions implemented.

Existence of own contribution to the collection and analysis of empirical data

All analyses and other methods applied were conducted personally by the PhD student under the supervision of her supervisor. The obtained results are unique for Bulgarian conditions and have an innovative and categorical application as an evidence-based practice when working with children on the autism spectrum. I believe that doctoral student Kamenski's research could be in the direction of future research on the effectiveness of the developed therapeutic parenting program in other categories of communication disorders accompanied by changes in emotional and behavioral functioning.

Contributions

I fully accept the points of contribution articulated by the PhD student. They are a direct consequence of the research and analysis. I would like to focus on the most significant ones, in my opinion:

1. Translation and validation for Bulgarian conditions of the FOCUS tool for assessing communication skills and their dynamics in different communication situations, with different communication partners, for children with ASD aged 2;0 to 6;0 years.
2. The instrument allows objective assessment of progress in verbal and non-verbal functioning in children with ASD and associated positive changes in social adjustment, behavior and emotions.
3. The obtained results allow the identification of specific areas for further speech therapy and specialized intervention.
4. An original methodology has been designed to actively involve parents in the therapeutic process, under the supervision of a specialist, which supports speech therapy on the one hand and parent-child interaction on the other. A method that, without a doubt, has a significant impact in overcoming the main clinical manifestations of the disorder.
5. Results presented on the effectiveness of the author's therapeutic intervention methodology support the introduction of evidence-based practices into the speech-language pathologist's clinical work.

Dissertation abstract

The presented abstract correctly reflects the main aspects of the research and the contributions of the developed work.

Impacts of the thesis on the external environment

Tsveta Kamenski has submitted four articles on the topic of her dissertation, published in journals included in the world scientific databases (Scopus). Her research interests are in the field of ASD, with a focus on language, speech and communication development, as well as working with parents of children with developmental disabilities. She has authored and co-authored 25 scientific publications, eight of which are indexed in Scopus. She has 39 citations in 23 papers (h-index 4, Scopus). Facts that unconditionally indicate the high research capacity and the quality of international recognition of the PhD student.

Personal qualities of the author

As a specialist and researcher Tsveta Kamenski is distinguished by her competence and interdisciplinary orientation. In her work she demonstrates a deep scientific interest, professional attitude and ethical conduct. She is a lecturer in various courses in Bulgarian and English, in the Bachelor's and master's programs in speech therapy at the NBU. He teaches courses in clinical psycholinguistics, prevention of communication disorders, integration of children with special needs, clinical aspects of non-verbal communication, and therapy for emotional-behavioral disorders in childhood. He has excellent organizational skills and responsibility for the tasks. She is a leader and participates in several projects related to communication disorders. The most important of them are to the European Social Fund - "Integration of children with communicative disorders" 2011, "Video modelling to develop and improve social communication skills in individuals with ASD" 2024-2025, "Integrated approach in the application of innovative therapeutic and para-therapeutic methodologies for the involvement of parents as co-therapists in the therapeutic process of children with ASD and similar disorders in Bulgaria", 2024-2025.

Opinions, recommendations and comments

My assessment of the work submitted for peer review is strongly positive. Doctoral student Tsveta Assenova Kamenski demonstrates the skills of planning and conducting independent research with scientific and applied contributions, the ability to research with literary sources in a complex interdisciplinary field. I would like to especially mention the excellent language style in which the dissertation is written - scientific and at the same time clear and understandable. I believe that the program developed, and the evidence of its effectiveness provides a good foundation for future work in evidence-based practices in the field of child development disorders.

Conclusion

I have no hesitation that Tsveta Assenova Kamenski's dissertation satisfies the high requirements of the Academic Staff Development Act in the Republic of Bulgaria, its Implementing Regulations and the relevant Regulations of New Bulgarian University for the requested degree.

I propose to the esteemed colleagues of the scientific jury to award the educational and scientific degree "Doctor" in the professional field 7.4. Public Health to Tsveta Assenova Kamenski for her dissertation entitled "INDIRECT INTERVENTIONS FOR THERAPY IN CHILDREN WITH AUTISTIC SPECTRUM DISORDERS".

27. 02. 2025 г.

Reviewer 
Assoc. Prof. Ekaterina Todorova, PhD