

REVIEW

by Prof. Snezhana Hristova Nikolova, PhD

about a dissertation on the topic „Model of improvement of social interaction of autistic students“

for the awarding of an educational and scientific degree „doctor“ in the field of higher education 1. Pedagogical sciences, professional direction 1.2. Pedagogy (Special Pedagogy)

PhD student: Chrysoula Anthopoulou

Research supervisor: Prof. Milen Zamfirov, DSc

General presentation of the procedure

By order No. № ПД 38-616/ 29.10.2024 г. of the Rector of Sofia University „St. Kliment Ohridski“ I have been appointed as a member of the scientific jury Chrysoula Ioannis Antopoulou, a full-time doctoral student in the professional field 1.2. Pedagogy (Special Pedagogy) with instruction in English. At the first meeting of the scientific jury, held on 12.11.2024, on the basis of Art. 2, para. 8 of the Regulations on the conditions and procedure for acquiring scientific degrees and holding academic positions at Sofia University „St. Kliment Ohridski“, I was appointed as a reviewer.

The dissertation was discussed at a meeting of the Department of Special Education, and all legal requirements for opening a public defense procedure were met.

Doctoral student Chrysoula Antopoulou has submitted all documents in electronic and paper format necessary for the defense of her dissertation, in accordance with the requirements of the Law on the Protection of Scientific and Technical Education of the Republic of Bulgaria and the Regulations for its implementation and according to the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at Sofia University „St. Kliment Ohridski“.

General presentation of the doctoral student

In 2009, Chrysoula Antopoulou received a Bachelor's degree in Preschool Education and Educational Planning from the University of the Aegean (Greece). She completed her Master's degree in Educational Sciences in 2016 from the University of Nicosia (Cyprus).

She has extensive professional experience in the field of preschool education as an employee in a private kindergarten (in the period 2010 – 2013) and as a preschool educator for children with special educational needs in different regions of Greece (in the period 2014

– 2022). Since August 2022 and currently, she is a special education teacher at the Ministry of Education of Greece in a special kindergarten for children with visual impairments.

She holds certificates for English language proficiency (Cambridge University), for computer skills (Aristotle University, Thessaloniki), for participation in the special education program (University of the Aegean, Greece) and for teaching writing and reading to the blind (Braille).

Chrysoula Antopoulou proves her interest in contemporary problems of special education by continuing her final degree of higher education, as a full-time doctoral student in the doctoral program „Special Education“ at Sofia University „St. Kliment Ohridski“ since June 2018.

Relevance of the dissertation work

The dissertation work is based on children with autism spectrum disorders and their development through effective interventions in preschool education. The autism spectrum is a topic that has attracted great interest and has been the subject of intensive research in recent decades. However, each specific study and research project is a step towards expanding and verifying the picture of the disorder. In this context, I assess the presented issues as interesting and discursive, with the necessary practical focus and with a request for real contributions in the refinement of innovative educational interventions.

The topic of the dissertation work is also relevant due to the fact that children with autism spectrum disorders are increasingly being educated in a general education environment. Difficult communication, lack of social communication skills, maladjustment and inactivity in social contacts are distinctive characteristics of this category of children. All this proves the usefulness of the development for pedagogical practice, considering that an adequate supportive environment in general education kindergartens and schools is a guarantee for providing quality education and development for children with special educational needs, some of which are those with autism spectrum disorders.

Structure and content of the dissertation work

The dissertation work submitted for review actually contains 154 computer pages, including 8 tables and 6 figures. A 26-page bibliography with a total of 368 sources in Latin is attached. Three appendices are included - Checklist for selecting peer groups for structured play (SPG); Current form of the Social Communication Questionnaire (SCQ) and Social Skills Profile for Autism, as well as an appendix with 12 photos reflecting the games in which children with ASD participate.

The dissertation work, in terms of volume and content, meets the requirements for

such a study in terms of formal indicators.

Structurally, the work is classical, consisting of an introduction, three chapters, a conclusion, contributions and literature. It is logically constructed and well balanced.

In the introduction, doctoral student Antopoulou enters into the problems to which the dissertation work is directed, emphasizing their significance and the need to develop the topic. Here, the main characteristics of children with autism spectrum disorder (ASD) are highlighted, such as impairments in social interaction and social communication, delayed language development, unconventional use of language and limited, repetitive patterns of behavior. The goal of the study is also defined – to develop strategies for improving the social and communicative competencies of children with ASD, thus improving their social integration.

The first chapter is dedicated to the social and communicative interaction of children with ASD. 5 paragraphs are included, which detail the main problem and research fields of the dissertation work. The increasing prevalence of this disorder is emphasized, which necessitates the need for more in-depth scientific research related to diagnostic criteria, early identification and the earliest possible start of therapy.

The first paragraph outlines the dimensions and manifestations of ASD in contemporary society and education. A detailed characterization of symptoms in preschool and school age is presented in terms of four categories: spoken language, ability to respond to stimuli from other people, interaction with others, and behavior. Some challenges for students with autism that they encounter in the classroom in terms of their social and communication skills and in terms of their behavior are indicated. In this regard, a set of effective communication approaches specifically designed for educational environments are listed. This paragraph also focuses on the etiology of ASD, noting that genetic, neuropsychological, and biological factors play a significant role. The diagnostic criteria for ASD are listed according to ICD-10, according to the American Psychiatric Association, and according to DSM-5 and include persistent deficits in social communication and interaction, along with restricted, repetitive behavior.

The understanding of the need to view and treat students with autism as full-fledged individuals, requiring concerted efforts from society to facilitate their integration, is at the forefront. The thesis is advocated that early intervention and therapy can significantly affect the social and communicative capabilities of the child with ASD. The importance of stimulation therapies, movement therapies, occupational therapies, sensory integration therapies, auditory practical therapies, imitative activities through role-playing therapies, the

TEACCH method, etc. is pointed out.

In the *second paragraph*, attention is drawn to the multifaceted social characteristics of students with autism and the difficulties arising from them.

The third paragraph examines the communicative characteristics of these students. Here, the patterns of behavior and language use observed in children with ASD are correctly presented, including repetitive or rigid language, echolalia, narrow interests and exceptional abilities.

Given the topic of the dissertation, a special *fourth paragraph* is set aside, which presents strategies and approaches for improving the social and communicative interaction of students with autism.

At the beginning of the paragraph, the stages of deliberate and purposeful communication in individuals with ASD are sequentially analyzed. This is followed by the presentation of various techniques for assisting children with ASD in the development of their communicative, speech, language and social skills.

On this basis, the social skills of children with ASD and the specifics of their interactions with other people are examined. Emphasis is placed on the development of social skills in different environments – family, school, public.

The last paragraph of the theoretical part is a summary of the problem of autism. In a concentrated form, the guidelines for therapeutic interventions with children with ASD are listed, which are a good basis for conducting reliable and high-quality experimental research.

I express my satisfaction with the presentation of the theoretical information and the conclusion reached by doctoral student Antopoulou regarding the creation of a supportive and inclusive environment that accepts diversity and promotes the social integration of children with autism.

The design of the study is presented in *the second chapter*. It adequately defines the main objective and research tasks. In this regard, the hypotheses of the study are justified – a null hypothesis, according to which children with ASD would not show a statistically significant improvement in social and communicative interaction after implementing an intervention program and an alternative hypothesis, which assumes that the improvement in their social and communicative interaction is statistically significant after the implemented intervention program.

The study included three kindergarten children diagnosed with ASD, aged 5 to 6 years. They are educated in a general education environment in southern Attica, Greece.

The methodology and methods of the study were correctly selected and described.

The research program is precisely developed and presented in detail. The study applied a multiple baseline design for respondents, including three phases: baseline, intervention and maintenance. In the second phase, a structured play group (SPG) intervention was implemented, which aimed to optimize the social and communicative interactions of children with ASD. Intervention sessions were held twice a week, each lasting approximately 30 minutes. Typically developing children who had been trained in the SPG program participated in them together with the children with ASD to ensure effective implementation. They were structured around play themes and activities tailored to the interests and skills of children with ASD – Building Blocks and Restaurant.

The measurement used in this study included diagnostic screenings, peer selection assessments, and dependent measures aimed at assessing changes in social functioning among participants with ASD after the structured play group (SPG) intervention.

The third chapter of the dissertation analyzes the obtained data.

In order to analyze the effectiveness of the intervention, a visual inspection of the graphical representations of the data was performed. The percentage of continuous data (PND) was calculated. At the same time, a qualitative analysis of the observed data was carried out in the three children with ASD. It is concluded that, overall, the implemented intervention program was found to be effective in improving the social engagement of students with ASD during the free play period. The analysis of the results of the Autism Social Skills Profile (ASSP) shows that the participants improved their general social functioning and their social skills and participation after the structured play group (SPG) intervention.

The processing of the obtained results is carried out using the SPSS statistical package for social sciences for each subscale of the Autism Social Skills Profile and the general social functioning results.

Statistical analysis showed that the intervention improved participants' social reciprocity, social participation, and overall social functioning skills and had no significant effect on socially inappropriate behavior alone.

Overall, the SPSS analysis found that the Structured Play Group (SPG) intervention program effectively improved various aspects of social skills and overall social functioning in children with autism spectrum disorder (ASD).

The conclusion is a meaningful summary of the findings presented by the doctoral student and a solid basis for recommendations regarding early intervention for children with ASD and the potential benefits of implementing structured group play interventions in

preschool.

Contributions of the dissertation work

Logically follow the contributions of the doctoral student's scientific research. They are correctly derived and fully correspond to the research work.

The following points can also be noted as contributions:

- ✓ precise theoretical research, which is of cognitive and informational value;
- ✓ searching and finding innovative opportunities for personalizing interventions for children with ASD in order to improve their socialization;
- ✓ implementing innovative practices in the form of games to stimulate general and additional support for children with autism in a mass educational environment;
- ✓ opportunities for developing the ideas set in perspective.

Abstract and publications

The abstract is developed on 43 pages. It corresponds to the structure of the dissertation work, presenting it in an adequate manner, reflecting the main theoretical positions and the results of the research conducted.

The publications on the topic of the dissertation work are four - three independent and one co-authored with the scientific supervisor. They meet the minimum national requirements for acquiring the ONS „doctor“. They were published in the period 2019 – 2022 in Collections of Reports from Scientific and Practical Conferences of Sofia University „St. Kliment Ohridski“. All are on the topic of the dissertation work. They are dedicated to the social and communicative interaction of students with autism and effective approaches and strategies for their development.

Personal impressions

I have no personal impressions of doctoral student Chryssoula Antopoulou.

Notes and questions:

In my opinion, the conclusions and recommendations made are insufficient in view of the serious experimental research and the precise analysis of the results obtained.

My questions are:

- ✓ Do therapists and teachers need additional training in the use of structured group play interventions with preschool children with ASD?
- ✓ What symbolic games would you recommend for use in working with children with autism?
- ✓ As a result of the research, what recommendations could you make to the

teacher regarding the effective implementation of play-based interventions for children with ASD?

CONCLUSION

The dissertation submitted for review, developed by doctoral student Antopoulou, meets the requirements for dissertations for the acquisition of the educational and scientific degree „doctor“.

Based on the outlined merits of the work and the demonstrated qualities for independent scientific research, *I give my positive assessment* and propose to the esteemed scientific jury to award the educational and scientific degree „doctor“ to *Chrysoula Ioannis Antopoulou* in the field of higher education: 1. Pedagogical Sciences, professional field 1.2. Pedagogy, doctoral program „Special Pedagogy“.

19.12.2024

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Prof. Snezhana Nikolova, PhD