



REVIEW

by **Prof. Dr. Dr. Mira Tzvetkova-Arsova**,

Department of Special Education at the Faculty for Educational Studies and the Arts of
Sofia University "St. Kliment Ohridski"

of a doctoral dissertation

for awarding of the educational and scientific degree "Doctor" (PhD) in the scientific field 1.2.
Pedagogy/Education (Special Education)

Doctoral student: Chryssoula Anthopoulou

Title: "Model of improvement of social interaction of autistic students"

Scientific supervisor: Prof. Dr. Dr. Milen Zamfirov

1. Short description of the presented set of materials for the procedure

By the order of the Rector of Sofia University "St. Kliment Ohridski" No. 38-616/ 29.10.2024 I have been appointed as a member of the Scientific Committee/jury for the procedure for conducting the defense of the doctoral dissertation of **Chryssoula Anthopoulou**, a full-time doctoral student in special education in English language at the Department of Special Education at the Faculty for Educational Studies and the Arts of Sofia University "St. Kliment Ohridski" with scientific supervisor Prof. Dr. Dr. Milen Zamfirov.

The set of materials on electronic media submitted to me for review includes the necessary documents, among them the full text of the doctoral dissertation in English language, the Autoreferat (Abstract) in Bulgarian language, CV, publications on the topic of the dissertation, etc.

2. Short biographical data about the doctoral student

Chryssoula Anthopoulou obtained her Bachelor's degree in 2009 in Preschool education and Educational Planning at the Aegean University in Greece. In 2016, she received her Master's degree in Educational Studies from the University of Nicosia, Cyprus. She was enrolled in a full-time PhD program in Special Education in 2018 at the Department of Special Education at the Faculty of Education, Sofia University. She is a PhD student at the Faculty of Special Education, Sofia University. She has graduated in 2021.

Since 2022, Chryssoula Anthopoulou has been working as a preschool teacher with children with SEN. She has worked in other places over the years, mainly in her specialty of preschool education.

3. Relevance of the topic

The topic of the dissertation is important and contemporary, given the high number of children and students on the autism spectrum who are the subject of the study, and the ambition of the task to develop a model for improving their social skills in the preschool education.

In this sense, there is little discrepancy between the dissertation topic, in which autistic students are featured, and the research subsequently conducted with a focus on preschool children.

4. Assessment of the structure and organization of the dissertation

The dissertation of Chryssoula Anthopoulou includes an introduction, one theoretical chapter, one chapter with the design of the research, one chapter with the analysis of the results, discussion, conclusion, contributions, bibliography, appendix. The whole volume of the text is 201 pages. The factual text until the Appendices covers 189 pages.

The introduction states and defends the relevance of the research topic.

Chapter One is theoretical and is entitled "Social and Communicative Interaction of Autistic Students–Overview". It consists of five paragraphs, each with multiple sub-paragraphs. The first paragraph "Autism – its dimensions and manifestation in modern society and education", defines the

autistic spectrum, outlines the causes of autism, provides a diagnostic picture and attempts to map the presence of these individuals in the life of society. In the second paragraph, the social characteristics of autistic children are outlined and in the third paragraph, their communicative characteristics are discussed. The fourth paragraph offers a description of some strategies and approaches to improve social and communicative interaction in students with autism, and the fifth paragraph makes a summary. My main critical remark here is that the text refers to 'students with autism', and subsequently it becomes clear that the research includes pre-school children.

Chapter two of the dissertation presents the design of the research. The main goal is well formulated and one hypothesis is defined. The research involves the analysis of three real cases of children on the autism spectrum aged 5-6 years (case-study) - two boys and one girl. Structured play groups (SPG) were implemented with them and their impact on social and communication skills in the three children with autism spectrum disorder was observed and monitored. The SPG program implemented in this study was conducted for a duration of 12 weeks to one year. Play sessions with the children were conducted twice a week and lasted between 30 to 60 minutes each. The ratio of children on the autism spectrum to typically developing peers ranged from 1:2 to 2:3 in order to provide sufficient number of opportunities for social interaction and for the development of new social and communication skills. The author selected two themes for the play games - "Building Blocks" and "Restaurant". Some other research tools used are the Autism Screening: Social Communication Questionnaire (SCQ), which is completed by parents and consists of 40 questions, and the Behavior Rating Scales: Autism Social Skills Profile (ASSP), which is included to measure social functioning in the children and is completed by teachers or other adults who know the child well, and which scale includes 49 questions. Social stories are also included, although their use remains for me somehow hidden and unclear.

The third chapter "Data Analysis" reports on the observations and the status of social and communication skills before and after the implementation of the structured play groups. In addition to the in-depth qualitative assessment and description, statistical processing was performed, looking for statistically significant relationships in terms of Social Reciprocity (SER), Social Participation/Avoidance (SPA), Detrimental Social Behaviors (DSSB), and assessing overall social functioning. Graphs showing the child's functioning at baseline and during the intervention phases are included.

A discussion follows in which, although not explicitly stated, it becomes clear that the hypothesis is confirmed.

There are no general conclusions, numbered and designed as such.

The conclusion nicely finalizes the reflections on the topic.

A References part follows with an impressive number of references, mostly in English language. Contemporary references are also included, from 2020, 2021 and 2022, which is important, given the vast number of new research on the topic of teaching and working with children and students on the autism spectrum, which in turn is good evidence of the knowledge of the doctoral student on the latest trends on the topic.

The Appendix begins on p. 182 and continues through p. 201. It contains the scale and questionnaire used as well as photographs of the children who participated in the research during some of the structured play groups.

5. Contributions of the dissertation to theory and practice

The contributions outlined by Chryssoula Anthopoulou are formatted as a general text and do not have separate numbering. It could be said that one contribution is framed in theoretical terms and one in practical terms. Both contributions emphasise that structured play groups (SPG) are described from theoretical point of view and applied, thus demonstrating their importance and relevance on one hand, and indicating how they can be used in real situations and settings, on the other hand. Here, I believe that the author could have outlined her contributions in a bit more detail and systematic way.

6. Assessment of the publications on the dissertation

There are four publications on the topic of the dissertation, three of which are single-authored and one is co-authored with the supervisor. They have a direct connection with the title of the doctoral dissertation. All of them are in the proceedings of scientific conferences of the Faculty of Educational Studies and the Arts in the years 2019, 2020 and 2022.

7. Abstract/Autoreferat

The abstract (Autoreferat) meets the requirements, as it conveys the content and structure of the main text of the dissertation well and in an appropriate, synthesized form. The abstract is 43 pages long.

8. Questions to the PhD student

I have two questions for Chryssoula Anthopoulou:

1. On page 132 it is stated that “Overall, collected PND suggest that the applied intervention program was effective in improving the social engagement of students with ASD during free play period. Katerina was an exception since her results varied from an ineffective to questionable intervention effect. This research objective was satisfied with the data collected.” What do you think leads to the lack of better social participation in this child?
2. Since the dissertation topic is about a model for improving social interaction, what exactly includes the model you are proposing?

In conclusion:

The text of the doctoral dissertation of **Chryssoula Anthopoulou** entitled "**Model of improvement of social interaction of autistic students**" is well structured and organized, thus meeting the requirements of the regulatory framework in the Republic of Bulgaria, stipulated in the Academic Staff Development Act and in the Regulations of Sofia University St. Kliment Ohridski for the acquisition of scientific degrees. There is relevance of the chosen topic, good structure and organization, well planned and conducted research, quantitative and qualitative analysis and interpretation of the collected results and data.

The Dissertation clearly shows that the doctoral student **Chryssoula Anthopoulou** possesses the necessary theoretical knowledge on the chosen scientific topic, as well as skills for their organized and coherent exposition. The PhD student has the qualities and competence to plan and practically conduct a research that involves the analysis of three real cases of children with autism spectrum disorder (case-studies), as well as the application of a scale and questionnaire, and the monitoring of the outcome of the application of structured play groups to improve social interactions. The doctoral student also has skills for analysis and interpretation of research data in professional area 1.2. Pedagogy/Education (Special Education).

Based on all stated above, I give a **positive evaluation** of the thesis and of the abstract/Autoreferat, and propose to the esteemed scientific jury to award the degree Doctor (PHD) to Chryssoula Anthopoulou in the field of higher education 1. Pedagogical Sciences, professional field 1.2. Pedagogy/Education (Special Education).