REVIEW

by Prof. Dr. Snezhana Hristova Nikolova, Shumen University „Bishop K. Preslavski"

of a dissertation work on the topic „**Reading disorders in students with mild mental retardation**"

for the awarding of an educational and scientific degree „doctor" in the field of higher education 1. Pedagogical sciences, professional field 1.2. Pedagogy, Doctoral program „Special Education" (in English)

PhD student: Thomai-Maria Andreopoulou
Scientific Leader: prof. DSc Neli Vasileva

General presentation of the procedure

By order of the Rector of the Sofia University „St. Kliment Ohridski" No. RD 38-57/ 29.01.2024 I have been appointed as a member of the scientific jury in the procedure for awarding the ONS „doctor" to Thomai-Maria Andreopoulou, a full-time doctoral student in professional field 1.2. Pedagogy (Special Pedagogy) in English. At the first meeting of the scientific jury, held on 13.02.2024, on the basis of Art. 5, para. 12 of the Regulations on the terms and conditions for acquiring scientific degrees and occupying academic positions at Sofia University „St. Kliment Ohridski", I have been designated as a reviewer.

The dissertation work was discussed at a meeting of the „Special Pedagogy" department, and all legal requirements for opening a public defense procedure were met.

Doctoral student Andreopoulou, has submitted all the documents in electronic and paper form necessary for the defense of his dissertation work, in accordance with the requirements of the ŽRASRB and the Regulations for its application and in accordance with the Regulations for the terms and conditions for acquiring scientific degrees and holding academic positions at Sofia University „St. Kliment Ohridski".

General presentation of the PhD student

In 2011, Tomai-Maria Andreopoulou received a bachelor's degree in Elementary Education from the University of Thessaly, Department of Elementary Education. Three years later, he received a certificate of qualification in Special Pedagogy from the same university. The training she received clearly motivated her to continue her education in this direction - in 2012 she graduated with a master's degree in special education from the University of Nicosia, Cyprus. Another master's degree has been completed – in Organization and Management of Educational Institutions in 2021 (at the International Greek University of

Thessaloniki). Since March 2020, he has been a full-time doctoral student in the Special Pedagogy doctoral program at the University of St. Kliment Ohridski".

From 2015 to the present, he works as a primary and special teacher of students with special educational needs and students with typical development.

Doctoral student Andreopoulou's education and professional experience explain her interest in education issues, including the difficulties in teaching students with special educational needs and the need for support. The topic of her dissertation work is relevant to her undergraduate and graduate education and qualifications.

Actuality of the issues of the dissertation work

In recent years, a review of the policies in the educational space has become increasingly necessary due to the presence of students with special educational needs (a large part of whom are mentally retarded) in general education schools. This is due to a number of circumstances, mostly related to the peculiarities of the mental development of these children. Therefore, they need support – in a cognitive aspect (especially in their literacy), in an emotional plan, to guarantee their socialization. Children with mental retardation have potential opportunities for development, which, however, can be realized with the help of specially organized training under the influence of specific methods and means of work. Difficulties in the learning process are provoked by various factors, one of which is related to their low cognitive activity. They have a number of peculiarities in the cognitive sphere that distinguish them from children with typical development of their age. Knowing these features contributes both to optimizing the process of their literacy and to their overall development and functioning.

Based on researched scientific publications and from his practical experience as an elementary teacher of students with various disabilities, PhD student Andreopoulou is directed to study the reading skills of students with mild mental retardation in the elementary stage of education. The topic is interesting because it treats one of the most important skills in the process of education of students with typical development and students with a mild degree of mental retardation in a comparative plan. In this context, I evaluate the presented issues as dissertationable, with the necessary practical orientation and with a request for real contributions in the assessment of the reading skills of mentally retarded students and in the refinement of efforts in terms of minimizing their difficulties in reading.

Structure and content of the dissertation

The dissertation submitted for review contains 135 computer pages of main text, with 18 tables and 20 figures included. A bibliography with a total of 180 sources in English

and Greek and an appendix with the diagnostic tool used in the study are attached.

The dissertation is a theoretical-applied study with a well-realized design. In terms of content and quantity, the work meets the requirements for a doctoral dissertation. Structurally, the work consists of an introduction, a theoretical framework that includes three chapters, a second part presenting the research design – chapters four, five and six, conclusions, recommendations for future research, contributions and a conclusion.

In the introduction, attention is directed to the term "mental retardation", noting that the classification of disorders of intellectual development is based on the individual degree of adaptability and IQ. A distinction is made between persons with mild mental retardation (IQ between 50 and 69) and persons with borderline intellectual functioning, which is not considered mental retardation (IQ 85 – 70). In the foreground stands out the need for individualized and targeted psychological support and intervention and providing positive motivation to students with mild mental retardation studying in a general education environment.

The theoretical statement of the problem is structured in three separate chapters. There is expediency regarding the presentation and analysis of the theoretical foundations of the research problem. The texts are proof of the good knowledge and orientation of the doctoral student in the classic (traditional) and modern interpretations of the essential characteristics of children with mental retardation. Skillfully handles the scientific literature and demonstrates a critical attitude and statement of one's own research position.

In the first chapter, theoretical and diagnostic problems of the condition „mental retardation" are presented. The etiology of mental retardation is presented, differentiating biological factors, metabolic disorders and environmental factors. Some of the genetic causes associated with mental retardation have been characterized – Down syndrome, Klinefelter syndrome, fragile X-chromosome syndrome, Prader-Willi syndrome, Turner syndrome. Against this background, modern variants of classifications of mental retardation are presented: Kirk, WHO (ICD 11), the American Psychological Association (American Psychological Association), which classifies the disorder of intellectual development through DSM-5-TR (2022) and American Association on Mental Retardation (AAMR). Certain diagnostic aspects regarding mental retardation - identification, differential diagnosis - are highlighted. Emphasis is placed on assessment of mental retardation through history taking, intelligence and special needs tests, adaptive behavior assessment scales. The importance of the multidisciplinary team in making a diagnosis of „mental retardation" is indicated.

The second chapter is a demonstration of the good awareness of doctoral student

Andreopoulou of the basic scientific issues related to the peculiarities of language functioning in students with mental retardation. Four paragraphs are structured here that help shape the research concept:

✓ Stages in the development of typical speech;

✓ Levels of linguistic analysis and their features in students with mental retardation;

✓ The importance of reading skills in education;

✓ Student reading development and basic reading skills (comprehension, decoding, fluency, vocabulary knowledge and phonological awareness).

In the *third theoretical chapter*, an analysis of the special education of students with mental retardation in Greece is proposed. The importance of the family environment for the acquisition of various skills - motor, social, cognitive - is briefly presented. The importance of self-determination of students with mental retardation in school settings and the support of teachers in this regard is indicated. In this regard, the normative framework of educational support in Greece is analyzed, laws 1143/1981, 1143/1981, 2817/2000 and 3699/2008 on special education and the opportunities for training students with mild mental retardation in general and special schools are cited and inclusion classes. The educational intervention and intervention, as well as the forms of assistance for developing the potential of these students, are indicated.

A special place is devoted to the different models for cooperative learning, outlining the advantages of each of them. PhD student Andreopoulou focuses on school intervention programs to support the language and speech development of students with mild mental retardation. Her focus is on short-term and long-term goals, on the organization of space, and on instructional materials, highlighting the need for both a behavioral and cognitive approach as well as educational software for teaching students with mental retardation—issues addressed in separate short paragraphs.

Given the topic of the dissertation, a special paragraph has been set aside that presents intervention methods for reading difficulties of students with mental retardation.

The way to the selection, systematization and analysis of scientific information in the Theoretical Framework is evidence of the good knowledge of the specific issues and of the doctoral student's ability to handle various sources of scientific information.

The research design is specified in the fourth and fifth chapters. The research methodology is presented in the *fourth chapter*. It adequately defines the purpose of the research, specified in four sub-objectives.

The goal set by doctoral student Andreopoulou is aimed at comparing students with mild mental retardation and students with typical development in terms of reading skills and in particular in terms of decoding, fluency, morphology-syntax and comprehension. According to the specifics of the topic, three hypotheses have been formulated. The research questions are relevant to the main research objective. Data collection tools are correctly selected and described.

80 students from the second and third grades of Greek primary schools in different prefectures (Attica, Boeotia, Thessaloniki, Ioannina, Cyclades, Larissa, Pieria and Rethymnon) took part in the study. 40 students (20 from second grade and 20 from third grade) have typical development and 40 students (20 from second grade and 20 from third grade) have mild mental retardation.

The „Reading Test – Test A" was used for data collection, which is standardized for the Greek student population and assesses the reading skills of students attending primary school up to the third grade. The standardized test includes four sections (decoding words, reading fluency, using the rules of morphology and syntax, understanding a text) through specific activities. It consists of 9 scales: reading nonsense words, reading existing Greek words, distinguishing meaningful from nonsense words, reading fluency, forming verbs, creating complex words, reading sequences of words, recognizing semantically equivalent sentences, and comprehension of text.

The processing of the obtained results was carried out using the statistical software package IBM SPSS Statistic, version 20. A descriptive statistical analysis was applied to analyze the demographic data, the results of which are presented in figures.

In the *fifth chapter*, an analysis of the results is presented. The specificity of the dissertation determines the logic according to which the presentation of the research results follows. Descriptive statistics and comparative analysis of individual variables between students with typical development and students with mild mental retardation separately for second and third grade are included at the beginning. The reading-decoding findings are sequentially presented; reading fluency; morpho-syntactic level in reading and reading comprehension. A comparative analysis of the data was carried out. Correlations between the variables indicated that statistically significant positive correlations were observed for typically developing students in all cases, except for the relationship between decoding and comprehension, which was not significant. While for students with a mild degree of mental retardation, all correlations were stronger than those for students with typical development, including between the decoding and comprehension variables.

On the basis of the obtained results, findings regarding the research questions are drawn. The interpretation of the data and the generalizations made prove the established hypotheses. The conclusion is a meaningful summary of the findings presented by the doctoral student and a serious basis for recommendations for the work of teachers of students with mild mental retardation regarding their reading skills.

Dissertation Contributions

The doctoral student determines contributions of a theoretical and practical nature. Theoretical contributions sound like conclusions and refer to the obtained results of the research. In my opinion, the effort of the doctoral student to select a current topic that has a direct relation to the scientific and practical sphere should be taken into account here. In addition, a serious theoretical analysis of discussion problems related to one of the types of dysontogeny and the specifics of learning reading habits by students with a mild degree of mental retardation in modern educational conditions has been carried out.

Practical contributions refer to the need for early assessment of reading difficulties (through a reading skills assessment test) to examine the level of development of cognitive factors for the reading status of these students. Some of the practical contributions sound like a recommendation. Here, the significance of the test used in the dissertation as a tool for assessing reading skills should be brought out, which can make it a good practice in teaching students with a mild degree of mental retardation.

Abstract and publications

The text of the abstract faithfully reflects the content of the dissertation. It is in a volume of 58 pages. A list of publications on the topic of the dissertation development is not attached.

A list of publications is also missing in the dissertation development. A separate file with an inventory of publications is attached to the doctoral student's documents. A total of eight publications are listed, but only half of them are related to the dissertation topic. Two are independent, and the other two are co-authored with the supervisor. They were published in the Collection „Education and Arts: Traditions and Perspectives" of the National Institute of Education and Research, UI „St. Cl. Ohridski", in the magazine „Special pedagogy and speech therapy" and in the magazine „Neos Paidagogos" in the period 2022 - 2023. As a number, they fully meet the minimum national requirements for acquiring the educational and scientific degree „doctor".

Notes, recommendations and questions:

✓ Some of the paragraphs and subsections are very short and give the impression

of fragmentation (eg 3.1.; 3.2, 3.3, 3.4.2, 3.4.4., 3.4.5., etc.). They should engage in more general problem areas.

✓ I believe that the scientific assumptions underlying the formulated hypotheses, some of which are distinguished by a predictable nature, could be deepened.

I recommend that PhD student Andreopoulou study and compare students with dyslexia and those with mild mental retardation in terms of their reading skills. This will allow drawing a number of conclusions and recommendations for practice.

My questions are:

✓ Do you think that early literacy instruction (specifically the acquisition of reading skills) is adequate for students with mild mental retardation in a general education setting?

✓ How would you explain the eighth implication of your conclusion that "second graders make fewer word omission errors in reading fluency than third graders"?

✓ Based on the obtained results, what conclusions would you draw regarding the preparation of teachers in Greece to work with students with mental retardation?

Personal impressions

I do not personally know doctoral student Tomai-Maria Andreopoulou, but judging by the scientific output – dissertation, abstract and publications, I can state that together, under the extremely professional and competent guidance of my supervisor Prof. Neli Vasileva, a scientific work has been finalized, whose the topic is interesting and relevant, especially in the context of inclusive education.

CONCLUSION

The dissertation submitted for review, developed by PhD student Andreopoulou, is in line with the requirements for writing a similar type of scientific work. The paper is well structured, with well presented theoretical analyzes and research methodology. On the basis of the scientifically interesting idea proposed in the dissertation development and the demonstrated qualities for independent scientific research, I give my positive assessment and propose to the honorable scientific jury to award the educational and scientific degree „doctor" to Tomai-Maria Georgios Andreopoulou in the field of higher education: 1. Pedagogical sciences, professional direction 1.2. Pedagogy, doctoral program „Special Education".

16.04.2024 г.   Prof. Snezhana Nikolova, PhD