REVIEW

of dissertation on the topic: "Disorders of oral language as the main predictor of developmental dyslexia"
for awarding the educational and scientific degree PhD in professional field 1.2. Pedagogy (Logopedics)

PhD student: Teodora Penkova Yaramova
Research supervisor: Prof. Tsvetanka Tsenova, DSc
Reviewer: Assoc. Prof. Diana Ignatova, PhD

I. Arguments for starting the defense of the dissertation. Description of the presented materials

The following documents have been submitted for the defense of the PhD student:

1. Protocol of the meeting of the scientific jury No. 1/13.02.2023.

2. Curriculum Vitae

3. Dissertation

4. Dissertation Abstract

5. Author's Papers in Bulgarian with regard to the topic of the dissertation – 3 pcs.

By Order No. RD 38-62/31.01.2023 of the Rector of the Sofia University "St. Kliment Ohridski" and on the basis of Article 2, paragraph 8 of the Law on the Development of the Academic Staff in the Republic of Bulgaria, I have been appointed as a member of the scientific jury in the procedure for the defense of the dissertation with the topic "Disorders of oral language as the main predictor of developmental dyslexia". The author of the dissertation work is Teodora Penkova Yaramova - a full-time PhD student in the Department of "Logopedics" – Faculty of Educational Studies and the Arts. The scientific supervisor is Prof. Tsvetanka Tsenova, DSc.

By Protocol No. 1/13.02.2023, I was voted by the members of the scientific jury as a reviewer of the dissertation work.

The documents provided for the defense can be accepted as a basis for the scientific jury to hear and evaluate the candidate for the acquisition of the educational and scientific degree PhD in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the Terms and Procedures for the Acquisition of Scientific Degrees and occupying academic positions at Sofia University "St. Kliment Ohridski".

II. A brief biographical data

Teodora Yaramova was born on May 11, 1981. In 2012-2014, she graduated from Plovdiv University "Paisii Hilendarski", Master's program "Communicative developmental disorders", professional qualification "Logopedist – a teacher of children with speech and language disorders".

In the period 2017-2019, she acquired the third, fourth and fifth professional-qualification degrees at Sofia University "St. Kliment Ohridski".

From 2019 to 2022, she was a full-time PhD student at the Sofia University "St. Kliment Ohridski" in the professional field of "Pedagogy", doctoral program in Logopedics .

In the period 2013 – 2023, she worked successively in the following institutions in the town of Smolyan:

- A Resource center for supporting the inclusive education and upbringing of children and students with special educational needs - junior teacher of children with speech and language disorders

- A Secondary School "St. St. Cyril and Methodius" – a logopedist

- A Regional center for supporting the process of inclusive education – a teacher of children with speech and language disorders

- An Elementary school "Ivan Vazov" – a logopedist

III. Content and a quality of the dissertation work

The dissertation work of Teodora Yaramova is with a volume of 160 standard typewritten pages of text, 23 pages of bibliographic reference and appendices of 9 pages, as well as 1 page with a list of the author's papers on the topic of the dissertation. The dissertation work is well structured. It includes one theoretical chapter, one chapter that describes the methodology of the experimental work, two chapters with the analysis of the results, respectively from the first and second stages of the research, conclusions, contributions, bibliographic reference and appendices.

The good balance between the theoretical and the research part is impressive. Numerous literary sources have been studied (276 authors, 27 of them in Bulgarian, 246 of them in English and three Internet sites), and interpretations of well-established classical authors in the field of the problem posed in the title, as well as contemporary ones, are presented. This gives a reason to assume that Teodora Yaramova has carefully and thoroughly studied the issues she was considering.

The content of the dissertation is systematic. This fact creates an impression of clarity and competence in the interpretation of the problem. Here, some recommendations can be made regarding the technical layout - after the numbering of the chapters, the points should be removed as a punctuation mark. The title of each chapter should be displayed on a new line. It is appropriate to include an index to the tables and figures in the table of contents and after that before the exposition.

Some recommendations regarding the content of the introduction, would be appropriate. This paragraph should introduce and direct the reader's attention to the main points and ideas in the dissertation. The introduction should present a brief, summary of chapters, important paragraphs, the author's conclusions, etc. In contrast, the PhD student focuses on descriptions of scientific facts with regard to the problem posed in the title. Numerous quotations are found with judgments that are subject to argument and that are expected to be subjected to critical analysis in the course of the exposition. Therefore, it is not appropriate to comment on them in the introductory part.

Chapter I is divided into two main paragraphs. The first one aims to build a theoretical basis of language function, and the second one is dedicated to language disorders. The latter acquires the meaning of a central theoretical construct in the exposition, as it discusses disorders of oral language, written language and early predictors of developmental dyslexia. The literature review is presented coherently and systematically, and was realized by a good academic writing style.

In terms of content, the multi-layered structure of this chapter to some extent diverts the focus of attention from the problem posed in the title. It can be said that the mentioned way of presenting of the text content is more suitable for a textbook format, as basic theoretical statements and knowledge are described and recreated, while in a dissertation format the focus should be the critical analysis of existing scientific knowledge in the field of the problem under discussion. In this sense, the literature review would gain more if it offered more conclusions, summaries of paradigms, concepts, ideas and judgments. Here it should be noted as a positive effect Teodora Yaramova's increased attention to operating with theoretical constructs, which is a sign of precision and reflects her desire to comply with and take into account the recommendations made during the preliminary defence of the dissertation.

Given the numerous data from literary sources, on page 68, Table. 9, the PhD student made a relevant systematization of modern authors with empirical and theoretical contributions in proving the causal relationship between oral language disorders and developmental dyslexia.

The second chapter of the dissertation presents the research program - goals, tasks, hypotheses, research participants. The research methodology is described in detail and systematically.

The leading (global), prospective goal, as the PhD student specifies on page 76, is "to contribute to the awareness of the need to adopt a generally valid practice for early diagnosis and prevention of disorders of written coding and decoding still at preschool age and the need to create a standardized operational tool for its implementation." The study of the Bulgarian experience can be considered here as an omission. It would be appropriate to mention the developed diagnostic model for assessing preschool children at risk for specific reading disability and the standardized three-stage

longitudinal test battery for children aged 5-7 years within the framework of the mentioned model according to Ignatova, 2014. The project of the tool is published in 2009 and 2010 in a two-part monograph.

One of the main purposes of the study was to determine "the extent of oral language impairment as an indicator of the degree of the risk for developmental dyslexia". Infact, the study looked for a correlation between oral language disorders and subsequent difficulties in written language. In connection with this idea, the methodology of the study was constructed. In this sense, it can be assumed that the main goal is ambitiously formulated and in view of what has been noted, it should be refined and further specified from the point of view of the realization of the study. It would be appropriate to reflect this in the topic of the dissertation. Otherwise, it can be assumed that the content of the study does not fully cover the topic of the dissertation work. Regarding this, I would like to note that on page 76, the first of the tasks reflects and is consistent with the content of the paper. Therefore, this task can be transformed into a main development goal.

Chapters III and IV present a detailed quantitative and qualitative analysis of the results obtained from the two stages of the research, accompanied by conclusions corresponding to the data. Empirical data are subjected to detailed statistical analysis that proves their value. The results obtained, their credibility and the way they are discussed are presented consistently and accurately. The attached tables, figures and diagrams appropriately visualize the parameters set by the PhD student.

Here I would make the following notes:

- The term "real score" was used in many places in the analysis. I would recommend replacing it with the term "raw score" as accepted in psychometrics.

- On page 94, for the purpose of clarity and precision of the statement, Table 15 should be titled similarly to Table 14, i.e. the title "Empirical data regarding intact children", to be replaced with "Empirical data regarding children with typical language development".

- On page 98, and further on on page 119 in the conclusions, it is noted that "low achievement of children identified at risk has a high identification and prognostic value." With regard to a higher degree of validity of this statement, I would recommend analyzing the "sensitivity" and "specificity" parameters of the results. "Sensitivity" will determine the probability of a correct assessment regarding the subjects belonging to the risk group. In order results to be of good prognostic value, they should be characterized by high sensitivity.

On the other hand, the "specificity" parameter would contribute to the reliability of the study in relation to the determination of the percentage of participants from the control group who definitely do not belong to the risk group.

At the end of the dissertation, 5 conclusions were summarized from the two stages of the research. They are well formulated and adequately reflect the results of the research. The general conclusion reflects the conceptual framework of the dissertation, although the proposition that "identifying children at high risk for dyslexia enables us to uncover the key cognitive factors and individual deeper deficits that would impede written language development" is more of generalized idea rather than a result of the current work.

The contributions of the dissertation reflect the efficiency of the scientific research done.

In view of the purity of the Bulgarian language, I would recommend the PhD student to refrain from using words of foreign origin that have been artificially introduced through literal translations from English-language literature. Regarding this I find the expressions "predictor", "predictive role" as inappropriate and I would recommend replacing them with Bulgarian words - trait, sign or even marker. The latter being a loanword from medical literature, but over the years it has also gained a popularity in specialized literature on logopedics. Similarly, "predictive role" should be replaced by "prognostic role".

The text of the abstract reflects the content of the dissertation. It is presented in a volume of 44 computer pages. The structure and the content, the analysis of the results, the main conclusions, the contributions and the author's publications on the subject of the dissertation work, are presented in a synthesis. The contributions of a theoretical and applied nature generally correspond to the real achievements of the author of this scientific work.

Seven author's papers in scientific editions regarding the topic of the dissertation were described.

Conclusion

The discussed dissertation work in terms of design, method of presentation, processing and analysis of the data, as well as with its contributing moments, satisfies the requirements of the Law on Scientific Degrees and Titles. This gives me a reason to propose to the Honorable Scientific Jury to award Teodora Penkova Yaramova the educational and scientific degree PhD in the field of higher education 1. Pedagogical sciences, professional direction 1.2. Pedagogy (Logopedics).

April 21, 2023   Reviewer:..

Sofia   /Assoc. prof. Diana Ignatova/