

REVIEW

from prof. Dora Levterova – Gadjalova, D.Sc.

(PLOVDIV UNIVERSITY “PAISIUS HILENDARSKI”)

of the materials submitted for participation in the competition

to occupy the academic position of "**associate professor**"

at the Plovdiv University “Paisii Hilendarski”

by: field of higher education 1. Pedagogical sciences

professional direction 1.2. Pedagogy

(Speech therapy)

Author: Teodora Penkova Yaramova

Topic: Oral language disorders as a major predictor of the onset of developmental dyslexia

Research supervisor: Prof. Dr. Tsvetanka Lukanova Tsenova, SU "St. Kliment Ohridski"

1. General presentation of the procedure and the Ph.D. student

By Order No. RD 38-62/31.01.2023 of the rector of SU "St. Kliment Ohridski" I am included in the scientific jury for the procedure for the defense of a dissertation on the topic: "Disorders of the oral language as the main predictor of the occurrence of developmental dyslexia", developed by Teodora Penkova Yaramova, a full-time doctoral student.

Teodora Penkova Yaramova graduated with a Bachelor of Arts in Social Activities at VTU "St. St. Cyril and Methodius", OKS "Master" in European Integration at VTU "St. St. Kiril and Methodius" and OCS "Master" "Communicative Disorders of Development" at PU "Paisiy Hilendarski". Since 2019, he has been a full-time Ph.D. student at the Department of Speech Therapy of the National Institute of Scientific Research at the University of St. Kliment Ohridski"

Her professional biography was initially related to diverse professions: waiter, bartender, social worker, office administrator, and sales agent. Since 2016, he has been working as a speech therapist: first at RCPPTS Smolyan, then at "Ivan Vazov" Primary School - Smolyan, and from 2017 until now as a speech therapist at SU "St. St. Cyril and Methodius" town of Smolyan.

Teodora Yaramova presents a complete set of documents for participation in the procedure.

The dissertation contains 196 standard typewritten pages of text, of which 160 are the main part of the thesis. The text includes 43 tables, 19 diagrams, and 3 figures. The bibliography contains 276 titles (27 in Cyrillic, 246 in Latin, and 3 websites).

2. Relevance of the topic

The presented dissertation is dedicated to current issues related to the early diagnosis and prevention of developmental dyslexia. The issue of the need to introduce a single standardized operational tool for early diagnosis and prevention of developmental dyslexia is discussed.

The topic is dissertationable and developed in unison with prospective educational trends for early diagnosis and prevention.

3. Knowledge of the problem

Ph.D. student Teodora Penkova Yaramova knows the problems of dissertation development. The theoretical development includes problems related to the analysis of language as a higher mental function, language disorders, written language disorders, developmental dyslexia, and specific language disorders as the main predictor of developmental dyslexia. The interpretation of language as a higher mental function is based on several scientific sources. The dissertation work would benefit if the scientific opinions of leading scientists in the field such as Luria, Mavlov, Pencheva, and Vasileva are discussed. An older definition given by Damasio (1992) is cited as the leading definition of aphasia. Part "II. Language disorders are developed at an elementary level. Also, studies on post-stroke aphasia in patients after 65 years of age /p. 22 and p.23/, do not correlate with the topic of the dissertation. It is likely that the Ph.D. student will explain to the public defense this reference to patients in the life stages of late adulthood and maturity.

Teodora Yaramova presents a general description of the predictors of developmental dyslexia. Makes a cursory attempt at a chronological examination of the issue of developmental dyslexia. In the theoretical part, Yaramova mainly refers to ICD-10, ICD-10 (2008), and this reference is puzzling because it is neither a comparative nor a recent revision. The latest revision of the ICD is ICD 11, published on the WHO website, effective from January 1, 2022. It is correct to note that there is a single notation of ICD 11 and DSM-V-Update /p. 42/ but only in one sentence related to "adding specifiers to the overall diagnosis of 'learning disabilities.' All analyzes were performed according to ICD 10.

It is noteworthy that attempts to interpret developmental dyslexia hardly analyze the scientific works of leading Bulgarian authors such as Todorova, Vasileva, Ignatova, Simonska, Valchev, Levterova, Tsvetkova, Zhekov, etc., even for phonemic awareness Shtereva is not cited, although there are single references to Todorova and Shtereva. Among the authors listed

in Table 9 who associate the linguistic deficit with impaired development of the written language, there is not a single Bulgarian author. It is also unclear whether the tables in the dissertation are authors. Interestingly is Table 10 with two headings: "Most frequently cited predictors of risk of specific dyslexia" and "Characteristic manifestations in oral language indicating risk of specific disorders of the ability to learn". Is it about all types of specific learning disabilities or just dyslexia? The author probably does not distinguish between "specific dyslexia", "developmental dyslexia" and "specific learning disabilities". There is a similar acceptance hypothesis in a generalized form, but it is not reflected and interpreted by the doctoral student. A second question arises here: What is the difference between these concepts?

Teodora Yaramova claims that "the problem of the absence of a unified methodology for the assessment of language and speech (communicative) disorders continues to be relevant in Bulgarian speech therapy practice" /p.74/. The quoted statement from the dissertation contradicts the position expressed on page 79 by Teodora Yaramova "The used research samples were created over time, approved and tested in Bulgarian speech therapy practice by individual authors or teams. They are based on a scientific methodology for collecting linguistic data. Most of them are not standardized, but over the years they have proven their usefulness in speech therapy diagnostics in Bulgaria and their statistical validity". Questions remain open to the doctoral student: "Are there or are there no effective research samples and tests in Bulgarian speech therapy practice that are used to evaluate oral language disorders?" And if so, what is the reason for creating a new toolkit?

In the theoretical part, the early diagnosis introduced in kindergartens aims precisely not only at early diagnosis, but also at early prevention, and from the age of three, not from the age of five /as laid down in the empirical research of the dissertation/ is not noted or commented on.

In the second chapter, labeled as Research Program, it is noted that the research is "longitudinal and provides a long-term study of the process of acquiring linguistic competencies related to written speech. The experiment is ascertaining and was carried out in two stages in the period January 2020 - December 2021." The fact that the research is related to a two-year period, which is assumed to be longitudinal, is puzzling. I cannot accept that the empirical study is longitudinal. The dissertation does not clarify: Why since the topic is "Disorders of spoken language as a major predictor of the occurrence of developmental dyslexia", is theoretical and empirical research and analysis done on written language? What warrants the study of written language? Based on what theoretical and empirical positions? No argumentation is given.

In terminological terms, the dissertation outlines a chaotic exploitation of concepts "learning disabilities", and "specific learning disabilities", as well as another group of concepts such as "oral language deficiency", "oral language disorders", "specific language disorders", "language deficit", "oral language deficit" as interchangeable and listed in the Tasks in the individual stages.

Author sources are not indicated for figures introduced in the text (Figure 1, Figure 2, Figure 3).

4. Research methodology

Outdated terminology "impressive language (comprehension)" is encountered in the tasks presented. The term "receptive language" is decidedly more modern.

The research methodology is presented in several stages:

The preliminary preparation.

The first stage of the research with the application of psycholinguistic and statistical linguistics methods.

The second stage of the study examines the written language at the writing level by means of text dictation.

Next comes tracking school performance.

It is not clear how the research participants were selected, and whether ethical norms and requirements were followed. It is only noted that Declarations from parents were collected, but it seems to me that even the Declaration for parents is not very precise, because it only refers to dictation, it is not indicated that research procedures will be carried out and that information will be collected about the success of students.

Statistical methods for the analysis of results are described on seven pages, which is unnecessary since an up-to-date version of SPSS can be used, Excel can also be used, and not calculated by formulas.

The third and fourth chapters are devoted to the analysis of the results. Despite the request for statistical analysis, primary results are presented in Tables in detail in the dissertation work. When requesting statistical processing, the primary results are not presented. Results are presented in charts, and part of the results are processed in Excel. It is not clear why the detailed description of the procedure for obtaining results for Cronbach's Alpha /p.112/ is applied, the analysis of the results is much more important, and the analysis is only marked. The same note applies to the formulas presented a second time on p. 137, p. 138, p. 139. The formulas are well-known enough to be described repeatedly, and it is unnecessary. Interpretations of the data obtained are important, and interpretations are strange. For example, "if a student makes a lot

of writing mistakes, and the number of wrong words is high" - brilliant logic. In counterpoint, the question arises: "Can 'if the student makes minimal writing errors, the number of wrong words be low?'" As well as "On general language performance at the level of graphic coding, the joint influence of the number of errors and the number of wrong words is greatest. Second, is the sheer impact of the number of errors. Thirdly - is the pure influence of the number of wrong words. That is the number of mistakes made and the number of wrong words together and separately has the largest share in the variance of writing'. What is the difference between the number of errors and the number of wrong words in word writing analysis? As well as the conclusion: "consistency of the three numerical indicators when superimposed to obtain a generalized picture of the development of writing" sounds vaguely reasoned.

In summary, the statistical processing of the obtained results is correct and evidentially supports the author's theses, but the interpretation can be much more spacious.

A positive fact is the author's detailed interpretation of the normality of the distribution in relation to the tasks set.

The analysis of the results reflected in Table 25 and Table 26 is cumbersome and unreadable due to the reverse positioning of the 9 pages of the tables themselves.

5. Characterization and evaluation of the dissertation work and contributions

The dissertation is written somewhat cumbersome and not distinguished by easy readability. The interpreted scientific literature is selected appropriately, but it is scarce and sketchy compared to the Bulgarian scientific literature. There are many cited authors with a rather archaic scientific output.

The obtained results are illustrated with tables and diagrams. It can be seen that the doctoral student Teodora Yaramova has invested a lot of work in conducting empirical research and in the statistical processing of the obtained results.

It is a fact that early diagnosis of oral language disorders can lead to the prevention of the onset of developmental dyslexia, but predictors of all specific learning disorders can be detected at an even earlier age, not five or six years.

I do not doubt the personal contribution of the doctoral student Teodora Yaramova to the empirical research and the obtained and processed results.

6. Evaluation of the publications and personal contribution of Ph.D. student

The Ph.D. student has seven publications, 6 of which are presented at conferences and one is in the journal "Special Pedagogy and Speech Therapy".

The contributions to Teodora Yaramova's dissertation can be distinguished as:

Contributions of a theoretical nature

- A scientific argument is made that oral disorders have the greatest value as an indicator of risk for developmental dyslexia

Contributions of a practical and applied nature

- A diagnostic assessment tool has been created that can be used to diagnose oral language disorders as a primary predictor of developmental dyslexia along with other existing and successfully applied research tools.

- The created instrument for the diagnosis of oral language disorders as the main predictor of the occurrence of developmental dyslexia has been successfully tested.

I do not accept the other contributions mentioned by the doctoral student.

7. Abstract

The presented abstract corresponds structurally and content to the dissertation work. The program of the empirical research and the obtained results are correctly reflected.

8. Recommendations for future use of dissertation contributions and results

As a recommendation to the Ph.D. student Teodora Yaramova, I recommend that she not make scientific idols for both scientific theses and authors. Dichotomous and/or contradictory opinions are often encountered in scientific research, which provoke discussions and develop science and practice.

Another recommendation is for subsequent studies to focus on the specifics of the study rather than looking for gravitating explanatory models. Try to use non-labeling concepts. Noting the "selected students" /p.77/ is insufficiently inclusive.

I have two final questions for the doctoral student:

- Define the object and subject of scientific research?
- What conclusions can be drawn from scientific research?

CONCLUSION

The documents and materials presented by Teodora Yaramova comply with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the Implementation of ZRASRB.

The dissertation work shows that Teodora Penkova Yaramova possesses theoretical knowledge and professional skills in the scientific specialty of Speech Therapy, demonstrating qualities and skills for conducting research with obtaining scientific contributions.

Due to the above, I give my positive assessment of the conducted research, presented by the above-reviewed dissertation work, abstract achieved results and contributions, and I propose to the honorable scientific jury to award the scientific degree "Ph.D." to Teodora Penkova Yaramova in the field of higher education: 1. Pedagogical sciences, professional direction 1.2. Pedagogy (Speech Therapy).

19.04.2023 г.

Reviewer:

(prof. Dora Levterova-Gadjalova, D.Sc.)