



## 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: Bianka Stankova**

**Title:** „*Attitudes towards nutrition and supplementation of children with special educational needs*“

**Scientific supervisor: prof. Dr. Emilia Evgenieva**

### 1. 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 included as a member of the Scientific Committee/jury for the procedure for conducting the defense of the doctoral dissertation entitled "*Attitudes towards nutrition and supplementation of children with special educational needs*" for awarding of the educational and scientific degree "Doctor" (PhD). The doctoral student is **Bianka Stankova**, a full-time doctoral student in special education 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. Emilia Evgenieva.

The set of materials submitted to me electronically meets the requirements and includes the required documents, among them:

- Dissertation in full text;
  - an Abstract (Autoreferat) to the dissertation;
  - a list of scientific publications on the topic of the dissertation and copies of the publications themselves;
  - a reference on the fulfilment of the scientific metrics;
  - two certificates of participation in a scientific conference with presentation of a paper, etc.
- The submitted set of materials on electronic media is complete and in order, and I accept it for review.

## **2. Short biographical data about the doctoral student**

Bianka Stankova graduated in Pharmacy, and her interest in the chosen topic of her doctoral dissertation comes from her main university studies. She has worked as a Master Pharmacist at Remedium Pharmacies in Sofia. She is a member of the Bulgarian Pharmaceutical Union.

She was enrolled in 2019 as a full-time PhD student in Special Education at the Faculty of Educational Studies and the Arts of Sofia University under the supervision of prof. E. Evgenieva. She graduated with the right to defend her dissertation in 2023.

## **3. Relevance of the topic**

The dissertation topic is very interesting and covers two broad scientific fields - children and students with SEN on one hand, and aspects related to their nutrition and supplementation on the other. In this sense, two dimensions of the care of children with SEN and attitudes towards their diet, eating habits and supplementation are appropriately intertwined.

Therefore, I believe that focusing on this interdisciplinary topic and formulating the chosen title is a very appropriate decision of the supervisor and the PhD student.

## **4. Theoretical knowledge of the dissertation problems**

The introduction skillfully introduces the relevance and importance of the topic, highlighting various international documents and legislative measures at national and international level related to nutrition in children in general and children with SEN in particular.

The theoretical part of the thesis is presented in one chapter. It contains three paragraphs. The first paragraph introduces some of the groups of children with SEN. The second is devoted to nutrition

and eating habits, and the third addresses the food culture. The first paragraph presents the children with autism spectrum disorder, the children with attention deficit hyperactivity disorder, the children with dyspraxia, dyslexia, and Down syndrome. Both definitions and current diagnostic criteria for each group of children with SEN are well and comprehensively proposed, and special attention is given to the dietary habits, and characteristics of each group. The second paragraph describes nutrition as a basic and physiologically related human activity, and discusses the eating habits. Various national and international documents addressing the importance of nutrition and specific elements related to it, such as those of WHO, UNICEF, the Bulgarian government, and other Bulgarian bodies, are referred to. Concepts such as 'diet', 'healthy diet', etc. are discussed. Paragraph 3 again refers to various important national documents, but now focusing on the food culture. Chapter One finishes by introducing working definitions for Health, Nutrition, Diet, Supplementation, Health Promotion, which are all important for the research and for the interpretation and analysis of the data and results and provide clarity.

Overall, the theoretical review shows a good and deep knowledge of the special literature on national and international level. Contemporary definitions of DSM-V and ICD-11 are cited, and various WHO, UNICEF, etc. documents are referred to and discussed. A good balance is achieved in the presentation of the different components related to the main topic - children with SEN and aspects related to their nutrition and supplementation.

The theoretical part, including the introduction and the first chapter, occupies pages 4-80 and is 76 pages long.

## **5. Research design, methodology and procedure**

The research design is presented in the second chapter of the thesis. It occupies pages 81-92 and is 11 pages long. The main goal is defined as 'to explore the views and attitudes of university students and professionals regarding the feeding and supplementation of children with special educational needs'. It has four sub-goals. There are nine tasks related to the main goal. Three working hypotheses are formulated which sound clear and to the point. Participants in the study are 179 university students, studying in pedagogical/educational specialties on Bachelor and Master levels from eight universities in the country, as well as 173 specialists, supporting the education of children with special educational needs, working in the Regional Centers in Sofia, Varna, Targovishte and Shumen, as well as primary teachers, speech therapists, psychologists, therapists/rehabilitators, etc. The total number of participants is 352. The high number of participants from various universities across the country, as well as specialists from different regional centres, can be considered a very

good solution. In this way, a fairly complete and comprehensive picture can be obtained of the attitudes and opinions of a wide range of individuals, and from different locations.

Two questionnaires were developed for the purposes of the study:

1. One questionnaire for university students with 24 questions;
2. One questionnaire for professionals with 20 questions.
3. Interview with specialists.

I think that the research tools are well selected and are directly connected with the main goal and the objectives.

## **6. Analysis of collected data and results**

The analysis is presented in chapter three. The data collected is analysed in the following sequence: demographic data; quantitative and qualitative analysis of the results; comparative analysis of the results from the questionnaires of the university student and the professionals; statistical analysis of the results. Chi-square test for independence was used for statistical analysis of the results by looking for Chi<sup>2</sup> values, p-value, Degrees of Freedom and significant differences of p-value.

The analysis is organized and presented in text, tables and graphs. Of interest to me was the conclusion on page 139 stating, "Significant relationships were observed mainly in terms of age, education and job position, and these factors have a significant influence on responses to certain questions. The relationship between education and job position were particularly strong with the questions related to diet and healthy eating quest". I would ask the PhD student to comment a bit more on what direction these significant differences are in - for example, are younger participants less knowledgeable and aware? I would also ask for further information on the question in the questionnaires relating to your knowledge of different diets that can be used for children and pupils with SEN - on what basis did you choose these particular diets and ask specifically about them rather than, for example, others?

A Conceptual Framework to support the development of a dietary culture in children with SEN is presented on page 160, which, in addition to being visual and graphical, also provides specific recommendations.

General conclusions and Recommendations follow, which are 23 and five in number respectively. I would recommend reducing the number of General conclusions, as reading all of them makes the text too long and heavy, and some of them could be successfully merged in a meaningful way, for example No. 16 and 17, 18 and 19 and others.

I also have another question in regard with the analysis of the data: I somehow could not see the results from the interviews or maybe they have been merged with the analysis of the questionnaires.

## **7. General characteristics and evaluation of the doctoral dissertation**

The dissertation has a total length of 207 pages, of which the factual text covers 174 pages, the References is between page 175 and page 191, and the Appendix in between page 191 to page 207.

The ratio between the different parts of the dissertation is approximately 76:11:90. A good balance has been achieved.

The theoretical part is well structured.

The research has been skilfully planned and conducted.

The analysis of the collected data and results is systematic and coherent. A conceptual Framework is included at the end.

The general conclusions are numerous and can be grouped thematically.

The conclusion is well constructed.

The References include 181 references and 25 internet sources. It is rich and impressive. References from recent years are included, which shows knowledge of the current state of the research topic.

## **8. Contributions of the dissertation to the theory and practice and significance**

The contributions that the doctoral student Bianka Stankova comes up with, are three in scientific-theoretical plan and two in scientific-practical plan. I accept their formulations. For me, a contribution is also the linking of two major scientific fields and the focus on a topic that, as far as I am aware, has not been the subject of much research in Bulgaria.

## **9. Evaluation of publications on the topic of the dissertation**

There are four publications on the topic of the dissertation, which are from the period 2020-2024, all in Bulgarian language and all already printed. Two are independent and two are co-authored,

one together with the supervisor. One publication is in the Proceedings of a Scientific Conference of Sofia University, two are in the Yearbook of the University in Shumen and one is in the Proceedings of a Scientific Conference of the University in Shumen.

I accept all the publications. Their titles and text have a direct relation to the topic of the doctoral dissertation.

### **10. Abstract / Autoreferat**

The Abstract/Autoreferat is 62 pages long. It conveys well the content of the main text. I approve its design and structure.

### **11. Comments, recommendations and questions**

I approve the dissertation with its literature review, the research and the analysis of the data and results obtained.

I have no recommendations, questions or comments other than the above three questions and one recommendation related to the General conclusions.

### **12. Personal impressions**

I have known Bianka Stankova personally for many years. She is a serious and thorough researcher who has spent a lot of time working on her dissertation.

I am familiar with her personal interest in healthy nutrition and supplementation, and their rational and proper application at early childhood.

I have excellent impressions of Bianka Stankova as a person and as a PhD student.

## **CONCLUSION**

The dissertation entitled "Attitudes towards nutrition and supplementation of children with special educational needs" by Bianka Ivanova Stankova contains theoretical statements and applied results, which constitute a contribution to the theory and practice and meets all the requirements of

the Law on the Development of Academic Staff in Republic of Bulgaria and the Regulations for its implementation, as well as the requirements of the Regulations of Sofia University St. Kliment Ohridski on the conditions and procedure for acquiring scientific degrees and academic positions.

The entire text of the dissertation, as well as the accompanying Abstract/Autoreferat, demonstrate that the PhD student Bianka Ivanova Stankova possesses very good theoretical knowledge and skills for the analysis and interpretation of scientific literature, as well as skills for merging interrelated scientific fields. She shows good and thorough skills for independent planning and conducting of scientific research. She has the necessary competence for the analysis and interpretation of scientific data and results, as well as for reaching and formulating general conclusions and recommendations.

Based on all stated above, I confidently give my *positive evaluation* of the dissertation and the Abstract/Autoreferat, the theoretical part, the research, the results and contributions, the publications, etc., and I propose to the Honorable Scientific Jury to award the degree of Doctor (PhD) to **Bianka Ivanova Stankova** in the field of higher education 1. Educational studies, 1.2 Pedagogy/Education, Doctoral Program in Special Education.

16 December 2024

**Reviewer:** .....  
prof. Dr. Dr. Mira Tzvetkova-Arsova