

REVIEW

On the PhD thesis of Bianca Ivanova Stankova on the topic:

Attitudes towards Nutrition and Supplementation of Children with Special Educational Needs.

Field of Higher Education “Pedagogy”

Professional Field “Educational Sciences”

PhD Programme “Special Education”

Reviewer: Prof. Katerina Karadzhova PhD

By order RD 38-619 from 30.10.2024 of the Rector of Sofia University “St. Kliment Ohridski” (SU), I have been appointed as a member of the scientific jury to ensure the process of defending the dissertation work on the topic: **Attitudes towards Nutrition and Supplementation of Children with Special Educational Needs.**

The author of the PhD thesis is Bianca Ivanova Stankova - a full-time PhD student at the Department of “Special Education” of the Faculty of Educational Studies and the Arts (FESA) with scientific supervisor Prof. Emilia Evgenieva PhD.

Ms. Bianca Stankova has over 15 years of work experience as a master - pharmacist. She graduated from the Faculty of Pharmacy of the Medical University, Sofia. The education she received, as well as the practical experience she has as a pharmacist, are a good basis for organising, consulting and analysing issues related to nutrition and supplementation of children with special educational needs (hereinafter: CSEN).

Relevance of the Topic and Reasonableness of the Goals Set

Issues related to nourishment, diet and nutritional supplementation for CSEN, as well as any influence they may have on one or another disorder’s occurrence and possibilities for therapy, have always concerned parents, teachers, medical and social workers.

Unhealthy eating habits can lead to a number of diseases and negatively affect children’s physical and cognitive functioning. This practically determines the need to initiate changes in

children's nutrition and create positive eating habits. The search for and subsequent discovery of a system of measures through which to influence the identified deficits in the CSEN is undoubtedly a very significant innovation and a prerequisite for writing a serious, relevant and noteworthy work.

Demonstrated Comprehension of the Problem

The thesis has a classical structure. It is compiled on 207 standard computer pages, and includes an introduction, three chapters, inferences and recommendations, contributory points of the dissertation, conclusion, list of used literature and an appendix. The textual part covers 174 pages, 21 graphs and 12 figures. The list of used literature includes 181 titles and 21 Internet sources.

As early as the introduction, in the context of global and national research, the relevance of the problem of nutrition and nutritional supplementation, as well as their role in the prevention of a number of diseases, is substantiated. It refers to the need for carrying out activities associated with health and healthy nutrition, which are currently insufficiently implemented. Indicative in this regard is the fact that at the time of the study there are no methodological guidelines regarding the requirements that must be observed when feeding CSEN.

The first chapter offers a theoretical analysis of authors, as well as theoretical interpretations relevant to the thesis. Here, a thorough theoretical analysis is made with regard to issues related to:

- Children with special educational needs and specifics concerning their nutrition;
- International, European and national documents, initiatives and good practices;
- Formation of a nutritional culture through the prism of the educational content.

The specifics of some of the CSEN, in which nutrition is important for their development, are shown in an accessible, concise and accurate way. These are children with autism spectrum disorder, children with attention deficit and hyperactivity, children with specific learning disabilities, children with dyspraxia and children with Down syndrome.

The factors under the influence of which traditional attitudes towards nutrition and nutritional supplements are changed are presented competently and professionally. An idea

which is promoted is that sometimes a minimal deficiency of a certain chemical element, for example iron, can negatively affect both the immune system and the quality of the cognitive functioning of the child with SEN.

Throughout the mentioned analyses, the author skilfully includes some of the national studies and analyses regarding nutrition and nutritional supplements, and draws a connection between them, chronic diseases prevention and formation of a nutrition culture through adjusting the educational content of some of the school subjects.

The second chapter presents the design of the experimental study.

The object, subject, goal (4 sub-goals) and tasks (9) are scientifically justified and very well described, while the hypotheses, numbering 3, are a logical consequence of them.

I believe that the hypotheses are perfectly formulated and fully reflect the scientific research and interpretations of the author with regard to the conceptual scheme proposed by her and the attitudes of students and pedagogical specialists.

Here, I would like to add that the professional profile of Ms. Stankova, as well as her many years of experience in the field of pharmacy, have a positive impact on the precision and objectivity of her research programme and on the quality of any subsequent interpretations.

Research Methodology

The methodology used is well selected and adequate to the set goal and tasks. The divided-by-stages nature of the experimental study, encompassing preparatory (determining) stage, main (executive) stage and final (concluding) stages, allows for a comprehensive qualitative analysis. Furthermore, the proposed adapted assessment instrument, and especially the statistic-mathematical methods, implement the primary data quantitative interpretations.

The wide-ranging and diverse selection of research subjects makes a good impression. Their number is 352, 179 of which are students, and 173 are pedagogical specialists (resource and primary teachers, psychologists, speech therapists, therapists, etc.) supporting the education of CSEN.

A positive aspect of the thesis is the developed research apparatus. It is original, adapted and oriented towards the individual target groups.

I categorically believe that the applied experimental methodology is adequate to the set goals, tasks and hypothesis of the study.

Characteristics and Evaluation of the PhD Thesis

One of the most valuable parts of the PhD thesis is its third chapter. In it, a comprehensive analysis of the obtained primary data is made. The analysis covers the individual questions in the survey. The primary data for the individual variables are illustrated with tables (21) and figures (12), which allows visualisation of the experimental interpretations.

The author analyses the students' survey and the pedagogical specialists' survey separately. As a result, a recommendation is made for the implementation of a conceptual scheme that increases awareness regarding healthy and balanced nutrition through the forms of general and additional support. This scheme makes it possible to positively influence the quality of life of CSEN, by forming an engaging attitude towards their own health and healthy nutrition.

I believe that the questions in the survey are informative, accurately decided upon, and the results can be used as a guideline for forming positive attitudes towards healthy nutrition and supplements.

During the experimental study and the subsequent analyses, all three formulated hypotheses have been validated, encompassing the claim that students do not have the necessary information about nutrition and nutritional supplementation, while teachers have a positive attitude towards including topics related to healthy nutrition in the school curriculum. Furthermore, the PhD student manages to formulate a conceptual scheme capable of encouraging children with SEN's use of nutritional supplements.

Contributory Points and Significance of the Thesis for both Scientific and Practical Fields

I accept the existence of the described contributions. Ms. Bianca Stankova has separated them into scientifically theoretical and scientifically practical. They are given in a generalised form, but still outline the contours and benefits of forming a culture of healthy nutrition and nutritional supplementation. I will try to formulate some of them in a way that I see and evaluate them:

1. Multi-scope and multi-directionality of the analyses. The author makes a complete analysis of the results of the conducted experiment in the direction of all variables included in the study. Here I refer to the qualitative analyses, comparative interpretations, which include comparing the studied parameters for the different groups of subjects, and the precise mathematical-statistical analysis;

2. The conducted study changes the value standards with regard to attitudes related to healthy nutrition of CSEN;

3. Justification is provided for the need that new topics supporting the formation of an adequate culture of nutrition in CSEN should be included in the educational curricula and programmes;

4. A request is made that disciplines that would support the formation of an adequate culture of nutrition in CSEN should be included in the educational curricula;

5. The proposed conceptual scheme can be interpreted as a new interactive educational model, through which prerequisites are created for the development of creativity, emotionality, social skills in CSEN, and new strategies for solving various life situations are introduced;

Assessment of Publications

Bianca Stankova has 4 publications related to the PhD thesis topic. Two are co-authored and two are independent.

In terms of form, amount, content, they meet the requirements for admission to public defence. The collected scientometric indicators (80 points) meet the minimum national requirements for a thesis' admission to defence.

Recommendations and Questions:

1. Is it possible for the author to expand her research and include not only children, but also pregnant women, because many of the mother's deficiencies can be transmitted to the child?

2. I recommend that the results of the study should be made accessible to the public and that the way should be paved for a new value, namely the need for healthy nutrition and the use

of nutritional supplements. Another recommendation is for the publication of the experimental analyses and results.

3. In the long term, it is important to outline, systematise and popularise activities related to the formation of a healthy nutritional culture, starting from the family, kindergarten, school, etc.

PhD Thesis Abstract

The abstract is written on 62 pages and presents the finished thesis in a concise form. It is formatted according to the requirements. It accurately and objectively reflects both the theoretical analyses and the experimental interpretations made throughout the thesis.

Conclusion:

Based on everything described and analysed in my review, I propose that a procedure for admission to public defence should be opened with regard to Ms. Bianca Stankova.

15.12.2024

Author of the Review:

Prof. Katerina Karadzhova PhD