

REVIEW

by competition for the academic position „associate professor“ in professional direction 1.2. Pedagogy (School hygiene and health education), announced by the Faculty of Pedagogy at SU “St. Kliment Ohridski” in State Gazette, issue 103/12.12.2023

Reviewer: Prof. Boncho Valkov Gospodinov, PhD – SU "St. Kliment Ohridski".

1. Contest details

The competition was announced for the needs of the "Theory of Education" department of the Faculty of Pedagogy at the "St. Kliment Ohridski" in the State Gazette, issue 103 of 12.12.2023. and is provided with the necessary auditorium occupancy. There is one application for the competition - for Ch. Assistant Dr. Berjuhi Mihran Yordanova.

2. Data about the participant in the competition

Ch. Assistant Professor Berjuhi Yordanova graduated from the University of National and World Economy with a major in Statistics and Econometrics in 2000. after defending a diploma thesis on “Dynamics of unemployment in the Republic of Bulgaria for the period 1990-1998”.

In 2004 graduated with a master's degree in “Social work with children” at the Faculty of Pedagogy of the “St. Kliment Ohridski” after defending a diploma thesis on the topic “Development of communication skills and positivization of empathetic attitude”.

Since the beginning of 2005 is a full-time PhD student in the scientific specialty Theory of Education and Didactics (Preschool Education) at the Department “Theory of Education” at the Faculty of Pedagogy of SU “St. Kliment Ohridski”. In 2009, after a successfully defended dissertation on “The child's readiness for school as a psycho-pedagogical problem”, he obtained PhD degree in education.

Since 2010 Dr. Yordanova works as a part-time teacher, and from 2021 until now as the Ch. Assistant at the Faculty of Pedagogy of Sofia University.

Since 2004 so far, the candidate has taken part in 14 different forms of additional qualification – language courses, doctoral schools, master classes and intra-university training, many of which are oriented towards increasing the research qualification and expertise of the participants.

Ch. Assistant Dr. Berjuhi Yordanova also develops serious public activity, participating in numerous associations, unions, editorial boards, etc. as an ordinary member, member of the management board or chairman.

According to the scientometric indicators - 645 points out of the minimum required 400, the participant in the competition meets the minimum national requirements for holding the scientific position of associate professor.

3. Scientific research activity

Ch. Assistant Professor Berjuhi Yordanova has a total of 66 publications, of which she participated in the competition for associate professor with 21 of them – 2 monographs (one based on a defended dissertation), 1 article (co-authored) published in a scientific publication, referenced and indexed in world-famous databases, 14 articles and reports in peer-reviewed and edited publications (2 co-authored, one of which is in Russian), 3 studies published in non-refereed peer-reviewed publications and 1 textbook.

The overall reading of the publications presented for the competition forms the impression of a permanent and deep interest of the candidate in the issues related to health education and upbringing and health culture (Nos. 1, 2, 3, 4, 5, 7, 11, 12, 13, 14, 16, 17, 19, 20), healthy nutrition of children and students (1, 5, 6, 7, 8, 9, 18), school hygiene (specifically 15, 21, but also in separate parts of most other publications), the mental health of children and adolescents (10, 12), the prevention of Internet addiction in children (11) and the child's readiness for school (2, 20). Familiarity with the publications submitted for review brings two features to the fore. The first is that the applicant's scientific and research interests extend to a wide range of issues of health education, healthy nutrition and school hygiene. And the second is that in almost all publications, the author tries to search for and discover the connection between theory, research and practice, for the effective implementation of which he formulates a number of conclusions and recommendations.

4. Characteristics of the publications submitted for review

Before proceeding to an analysis of the publications submitted for review, I would like to specifically note two circumstances. First, three of the submitted publications (3, 10, 11) are co-authored, but there are no separation protocols or other documents clearly indicating which of the co-authors is involved with which part of the text. Therefore, in my opinion, they cannot be properly reviewed. To a very large extent, the book published on the basis of a defended dissertation can be counted among these publications (2). The text is qualitative in terms of structure and content, a very well planned and implemented empirical study is presented with a very good statistical and theoretical analysis of the obtained data. But it clearly repeats the dissertation work that has already been peer-reviewed as part of the degree procedure.

And secondly, since in my capacity as a educationalist and engaged in educational research I do not have the necessary medical education and expertise, I will focus my analysis on the pedagogical value of the candidate's publications, as well as on the quality of research presented in some of the publications.

I will focus first on the publications that specifically focus on health education and upbringing (##1, 4, 5, 7, 12, 13, 14, 16, 17, 19, 20). The main thing that stands out here is the lack of an adequate author's pedagogical interpretation of the main concepts used. In many places in the mentioned publications, the concepts “health education and upbringing” and “health upbringing” are equated. And if this is somewhat acceptable for authors who are not part of it from academic units such as the Faculty of Pedagogy and the Department of “Theory of Education”, this is not acceptable at all for a person like Dr. Yordanova, who is part of these units. In some of the publications submitted for review, the following phrase appears as a definition of health education and upbringing “Health education generally represents a purposeful specially organized educational process that takes place in the family, kindergarten, school and in the whole society.” (4, 13) In the publication under #3 is "Health education and upbringing...”. But this statement, although true in itself, is very general and refers to any educational process oriented to the formation of knowledge, skills and attitudes in the field of moral, aesthetic, physical, health, etc. education.

What has been mentioned so far also refers to the “Educational and upbringingnal aspects of healthy eating” indicated by the author in two of the publications (1 and 5). When distinguishing educational and upbringingnal aspects, it is more than necessary to distinguish them clearly and to define them separately. And this is not done. Which means to me that the author does not distinguish between the concepts of “education” and “upbringing” as content, nor does he know the relationship between them. And these are concepts with the status of categories in pedagogy as a science.

And also, in the habilitation thesis (1) only 6 pages (97-102) are allocated to the educational and upbringingnal aspects of healthy eating against the background of 102 pages of the theoretical part of the monograph. And they are highlighted as the main emphasis already in the title! And in these 6 pages the majority are quotations from documents and other sources. And the author's analysis and argumentation should stand out. But they are missing.

In addition, the habilitation work uses the concept of “educational influence”, it is claimed that the degree of its manifestation will be measured within the framework of empirical research, but it is not defined. And here the question reasonably arises how to operationalize a concept that is not defined, i.e. what are the variables, the changes in the values of which will be measured. It is true that the questionnaires mention organizing activities, communicating information, directing

attention, etc. But if this is taken as characteristics of educational influence, it should be justified, and it is not.

And one more thing, on p. 18 of the habilitation thesis (1) we read: “Based on the upper school age limits discussed above - between 15 and 18 years, between 15 and 19 years, as well as between 16 and 19 years, for which the opinion is not unanimous, for the needs of the present monograph for upper school age, the age between 15 and 19 years will be accepted. It should be borne in mind that this limit is conditional because of the class-lesson system of organization of the learning process (emphasis added by me, B. G.), within whose scope also fall persons who have reached the age of 19, but have left the period of childhood.” Here, obviously, no distinction is made between a class-lesson system (in which adult students over 19 years of age are also educated, for example in evening high schools) and a system of secondary education, and more precisely its structure, by virtue of which 19-year-olds are students - a difference that a teacher at the Faculty of Pedagogy (regardless of habilitation or non-habilitation) cannot help but make.

It should be noted that in quite a few of the publications texts of a large volume are repeated one to one. For example, in the article “Educational and upbringing aspects of healthy nutrition of students” (5), the text is almost identical to that of the paragraph “Educational and upbringing aspects of healthy nutrition of students” in the habilitation thesis. As both texts are characterized by many quotations and lack of any pedagogical interpretation of the mentioned aspects. I do not deny the possibility, in certain cases and the necessity, of texts from one publication of a given author being used in another of his publications, but in case they lead to the analysis of other problems and lead to other conclusions, but this is not the case here. And the author, in his later publication, does not mention that the text in question is borrowed from a previous publication – through a reference in parentheses or under a line. The same (repetition of the same texts) is also characteristic of most publications dealing with the problems of healthy eating (1, 6, 7, 8, 9).

In addition to what has been mentioned so far, I would also like to dwell on the research, the results of which are presented in several publications (1, 16, 17, 18, 19). All of them are the work of Ch. Assistant Dr. Yordanova and, unfortunately, sharply contrast with the research presented in the book, published on the basis of a defended dissertation work. I would only mention that the conceptual framework and setting of the study (it is essentially a dissertation) presented in the introduction are very adequately formulated. The question arises, why is this not the case with the research presented in the habilitation thesis, as well as with other studies? Is the lack of scientific guidance the reason? If so, then obviously the candidate has difficulty in planning, organizing and carrying out his own independent research. And in order not to be vocal, I will dwell on the independent studies presented in the publications.

I will start from the habilitation thesis (1). On p. 103, in the paragraph “Organization and methodology of the empirical research” of chapter three, we read: “The research process was implemented with 399 children between the ages of 15 and 19 in the period January-March 2022 and with 31 teachers in November 2022.” But the structure of each of the samples is not presented (for example, how many of these 399 students are 15, how many are 16, 17, 18, and 19? How many of them are girls and how many are boys? The age differences between 15-year-olds and 19-year-olds are very large and this inevitably affects the way they answer the questions on the questionnaire. Gender differences also lead to statistically significant differences in opinions, attitudes and evaluations. There is also a lack of questions about the place of residence, in which the surveyed persons study - village, small town, large (regional) city. The differences in this regard also affect the opinions and assessments of the respondents. It is true that the questionnaires include relevant demographic questions about age and gender at the end of the data analysis there are graphs that present the percentage ratios by age and gender. But there is no analysis of any possible differences in opinions, attitudes and evaluations between individual sub-samples. And this is extremely important both from a pedagogical (after all, it is about educational and upbringing aspects of healthy eating!) and from a medical point of view!

As for the sample of teachers, it is so small in volume that it cannot claim to be statistically representative at all. 10% of 31 teachers are 3.1! And if the data from such a study will be part of a monograph, it is more than recommended that it be obtained from a sample with a sufficiently large volume (it does not necessarily have to be statistically representative). Additionally, the structure of this sample is also not represented, and it matters! It is true that in the survey card for teachers, a question was asked about their gender. But that's all! The answer data for this question is missing. And there are other demographic characteristics that definitely influence the answers of the teachers - age, seniority, school grade in which they teach (primary, junior high, high school), place of residence, which are somehow ignored by the author of the study.

On the same page, the hypothesis is presented, which is formulated as follows – “There is not enough educational and educational influence on the part of teachers in the direction of acquiring knowledge and forming skills for healthy eating in children of upper school age (between 15-19 years).” It is an alphabetic truth that a hypothesis is formulated on the basis of a constructed and theoretically grounded concept of the author of the research about a given problem (in this case – about the educational and upbringing influence of teachers on the formation of knowledge and skills for healthy eating) and is derived from this concept so that by testing the hypothesis in the field the validity of the concept can also be verified. In this case, such a concept is missing. The paragraph after the hypothesis presenting

“scientifically proven formulations” through quotations from other authors is not a concept.

Another issue is that, in principle, the hypothesis follows the object, the subject, the goal and the tasks of the research, because the hypothesis is verified through the implementation of the tasks to achieve the set goal. Here, too, the connection between object, subject and goal of the research (although it begins with the goal) is not clearly evident. The object is very adequately formulated, but the subject of a given study cannot “focus” on something, it is something - in this case, the most appropriate subject of the study would be the educational and upbringingnal aspects of healthy eating (although, as I mentioned above they are not clearly differentiated and defined). In short, all this is a consequence of the lack of a clearly and unambiguously constructed and theoretically grounded author's concept of the educational and upbringingnal aspects of healthy eating for children of upper school age.

All of the above leads to ambiguity about the type of quantitative empirical research that has been undertaken. On the one hand, the hypothesis formulated in this way implies an explanatory study aimed at checking the reasons for the degree of manifestation of the teaching-educational influence established in the study (i.e. checking statistically significant causal relationships), but, on the other hand, the formulation of the goal implies descriptive research aimed at collecting data describing and revealing the educational and upbringingnal aspects of healthy eating. The question arises which of the two? Which question is not answered in the monograph. This ambiguity also affects the analysis of the research data, which is not sufficiently logically coherent and consistent.

Another publication in which research results are presented is the article “Results of research on the state of health education in the Bulgarian school”. The article presents the results of the author's research. The request in the title is very serious. At the beginning of the text, although briefly, the new understanding of the World Health Organization about the essence, goals and specifics of health education is presented, and at the end of the article, conclusions and recommendations are formulated, which also sound serious enough. It is not serious, however, to claim that the state of health education in the Bulgarian school can be investigated through a survey conducted with 30 students from the first year of the specialty Pedagogy. And with a questionnaire of only 8 questions. The conclusions that are formulated at the end of the publication should be the result of a larger study (even if it is not statistically representative!), including students from the high school level of the secondary school, teachers, principals, and why not parents. Then the conclusions would be much more convincing. And one more thing – the age and gender structure of the sample is presented, but the possible differences in the opinions and evaluations of the respondents as a consequence of the demographic

differences are not sought. But with a sample of such a small volume, this would hardly be possible. And it is necessary and useful! In addition, the text (p. 115) claims that the risk factors endangering the health of the population have been revealed. But they are not “revealed” by the author of the post, but included in a short quote by an author of a cited source used. In short, the results of the conducted research in no way correspond to the intentions stated in the title and at the beginning of the text, and the research itself is at a very low level and raises serious doubts about the research expertise of the author, who is, after all, a university teacher with a doctorate degree.

Another publication presenting research results is the study “Contemporary Aspects of Eating Habits in Primary School Children”. In the section entitled “Empirical Research Methodology”, the conceptual framework of the study is presented. And here, as in the habilitation thesis, the relationship between object, subject and goal of the research is not clear and unambiguous. The object is very adequately formulated, but the object of a study cannot “focus” on something, it is something. And here is the wording of the subject of the research: “The subject of research focuses on the influence of primary school age on children's eating habits and, more specifically, the frequency of consumption of healthy and harmful foods, as well as the sources of information that children use about healthy diet.” If we abstract from the so-called “focusing”, we see that the wording of the subject is ambiguous. First, the question arises which is the subject - the influence of primary school age on eating habits, the consumption of healthy and unhealthy foods, or the sources of information about healthy eating? The lack of connection between object and subject of research is obvious. And the wording of the goal of the research (“studying and establishing the frequency of consumption by children of primary school age of useful and harmful foods.”) coincides with part of the subject. Furthermore, the research conducted is quantitative in nature, but it is not clear whether a hypothesis is being tested (explanatory research) or whether a research question is being answered (descriptive research). Both are missing from the conceptual framework. Here once again the lack of research planning expertise is evident. As for the organization - the sample (95 children of primary school age – first, second, third and fourth grade) is of an acceptable volume, but with an unclear structure - how many of the examined children are from the first, how many from the second, etc. class, how many boys and how many girls, from which schools in which settlements. Another question is whether and to what extent all first-grade students (even at the end of the school year) are able to adequately fill out a questionnaire. It is common knowledge that even quite a few second graders struggle with reading and writing. Chart 6 on p. 84 and chart 7 on p. 85 are repeated (the percentages also match), both representing the frequency of vegetable consumption. But the analysis after chart 7 is about the frequency of consumption of milk and milk

products. It is interesting how it happened that the frequencies of consumption of two food groups match one to one? And it would be interesting Ch. Assistant Dr. Yordanova to clarify what he understands from the answer of 56% of the children that they consume healthy foods “around school” - not at school, not at home, but around school. One could also comment on the options for answers to other questions proposed in the survey card, but I will stop there. In summary, it is unfortunate, and inadmissible, to make generalizations and conclusions of a generally valid nature (as the ones presented at the end of the study sound) based on such “research”.

And finally, I will dwell on the studies entitled “Healthy education in the family through the eyes of students” (19). On p. 154 we read: “The survey includes a variety of questions - closed, open and questions with a 5-point **bipolar scale** for the assessment of each statement.” Apparently the author is not aware of which assessment scales are bipolar and which are monopolar. Because all the scales are in the positive spectrum from 1 to 5, i.e. monopolar! Also, all the questions asked (except one) involved scoring on a scale, but for most of them the scales were verbal equivalents of numerical values, and therefore many of the answers raised questions. For example, what does it mean that 61.5% of respondents suffer from “the least” depression and 2.56% “the most”? And what does it mean to suffer “on average” from depression, as 10.3% of respondents indicated? Or what does it mean to smoke the least, a little, an average, a lot, and the most? Another issue is that there are apparently no open questions in the questionnaire, never mind that the author mentions them. Finally, research conducted within a sample size of 39 hardly allows the formulation of serious conclusions and recommendations.

5. Main Contributions

The mentioned in the previous part does not give me grounds to infer any significant contributions as a consequence of the candidate's research activity. Which is why I cannot accept the contributions formulated by her.

6. Questions and recommendations

To Ch. Assistant professor Dr. Berjuhi Yordanova, I have the following question:

On p. 8 we read: “In this sense, parents, teachers, psychologists, doctors, **various school** and non-school **public institutions** and others have a significant role in the assimilation of knowledge and the formation of skills and habits for healthy eating at school.” My question is what different school public institutions than the school does the author have in mind?

And my recommendations to Dr. Yordanova are two. First, to pay more serious attention to expanding and deepening his pedagogical expertise. And secondly, to learn more in detail and in depth about how to plan, organize and implement an empirical study.

7. Conclusion

In conclusion, I declare that, bearing in mind everything mentioned so far, I suggest to the members of the scientific jury **not to choose** Ch. Assistant Dr. Berjuhi Yordanova for “associate professor” by professional direction 1.2. Pedagogy (School hygiene and health education), for the needs of the Faculty of Pedagogy at SU “St. Kliment Ohridski”.

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