**STATEMENT**

dissertation for the award of the educational and scientific degree "Doctor", professional field 1.3. - Pedagogy of education in... (Methodology of education in physical education and sport)

***THEME:*** *"The effect of extracurricular activity on the physical fitness of 15-16 year old students"*

PhD student: **Martin Yordanov**

Scientific supervisor. Prof. **Georgi Ignatov, PhD**

Reviewer. **Assoc.Prof. Emil Atanasov, PhD**

**I. Data about the PhD student**

Martin Yordanov was born on 26.03.1985.

He graduated from New Bulgarian University with a professional qualification "Economist". He holds master's degrees from two universities. At the UNWE he studied Media and Journalism with a specialization in Public Relations, and at the NSA Vasil Levski he obtained a professional qualification of Master in Physical Education and Sport.

The doctoral student's interest in the topic of the dissertation submitted to me for review flows naturally from the facts presented in the work engagement.

**II. Characteristics of the submitted dissertation**

In modern society, the importance of physical education and sport as part of social activities is constantly growing. This importance has become more and more pronounced, especially in the last two or three years, a time in which the whole world is living under constant constraints. The traces of the global pandemic, together with technological developments, dynamic digital transformations and the competitive environment in which the Bulgarian education system is developing, pose increasing challenges to all institutions in this sector. The use of innovative approaches in teaching, digital and technological tools in learning are among the priority goals of every school. However, we must not forget the conditions in which pupils play sport, the means used to actively involve them in PE and sport classes, and the curriculum and scientific provision. In the field of school physical education, alongside the regulated forms of activities for the different levels of education, an important component is all the activities related to the expansion and enrichment of extracurricular sports activities.

The resources in the educational system - informational, material-technical, financial, personnel, scientific and legal-normative have a significant impact on the functioning and development of extra-programmatic sports activities. The need to enrich the methodological and programmatic support, including the development of training programs and plans, and the creation of an algorithm for tracking their effect comes to the fore.

In this sense, I believe that the dissertation submitted for review addresses a topical problem of marked social and practical importance.

It is developed in a volume of 145 pages. It is illustrated with 32 tables and 43 figures. It includes a rich bibliography with literature sources in Bulgarian and English, including Internet sites - 137 in total.

**Chapter 1** presents a comprehensive critical analysis of the theoretical and methodological concepts of the problem in 5 thematic areas.

The first strand *"State and Problems of Physical Education and Sport in Secondary Education in the Republic of Bulgaria"* fully reflects the current state of the student sport system. The diagnostic analysis covers the key areas of provision - financial, personnel, material and technical and information.

In view of the completeness and depth of the content analysis in the next theoretical strand *"The role and place of extra-curricular activities in PE and C"*, I think it would be good to analyze the basic conceptual apparatus - extra-curricular, extracurricular, after-school activities, forms of activities, organizational foundations, modernist vision in their development.

The next strand reflects in depth and comprehensively the characteristics of school age (12-17). The topic is widelydiscussed in sports science. The author has skillfully interpreted and presented the facts related to the physical development of students at this age, as well as the effects of physical activity.

The other key component included in the topic of the doctoral thesis is the subject of interpretations in the next strand. The author has provided a comprehensive analysis of the research, content and structure of the concept of physical fitness. The content includes the author's research in a wide time span (from the beginning of the 20th century to the present day).

In the last theoretical direction Martin Yordanov analyzes the conceptual foundations of sports training, including the principles of sports training, components of external load, peculiarities in the development of individual motor qualities.

Based on the thorough and precise analysis, the formulation of the working hypothesis deserves attention. In a meaningful way, the author's expectations in the direction of searching for opportunities to improve the physical fitness of 15-16 year old students are presented purposefully and completely correctly.

**Chapter two** outlines the characteristics of the research. I believe that the formulated aim fully corresponds with the topic of the research thesis. The stated tasks complement the framework of the research work, following technologically the fulfilment of the stated aim. I believe that some of them can be refined and specified (task3), or completely eliminated (task7). It is noteworthy that an appropriate toolkit of research methods was used to address the aim and objectives. I believe that "talkbacks" as a scientific method can be transformed as "focus group discussion". The research methodology is also correctly described with information about each of the tests used.

In this chapter, we must emphasize the precision with which the pedagogical experiment is described - organization, content, methodological requirements, some normative tables for the evaluation of indicators. Also impressive is the description of the extra-curricular activity programme - structure, and annual planning based on the sports included - athletics, football, basketball and volleyball.

**Chapter three** presents the results of the empirical studies that aim to prove the effectiveness in the proposed program.

The first strand analyses the results of descriptive methods among the two target groups. I believe it is telegraphic rather than critically tied to the topic of the PhD thesis.

I believe that this rich empirical material also implies some bivariate distributions in the responses that are essentially absent. For example, a cross tabulation could be made according to students' "interests" outside school and their commitment to sports.

In the following section *"Analysis of the results of the pedagogical experiment" the* empirical data are correctly and thoroughly analyzed, as well as illustrated correctly according to the adopted methodology.

In the next section, an in-depth analysis is performed based on the correlations applied to the variables under study. The developed matrices illustrate excellently the correlations in strength between the physical performance indicators and the other tests characterizing the level of the basic physical attributes - speed, strength, agility and endurance.

In Chapter Four, I believe that the conclusions drawn are purposively applied to only part of the research tasks. In terms of content, recommendation 1, 2 and 3 relate more to the conclusions.

**III. Critical comments, questions and recommendations**

There are no significant criticisms or suggestions, other than those described above, but these do not alter the overall satisfaction with a well-designed and structured work. No plagiarism was noted.

**Questions:**

1. In the analysis of the general state of the PV and C system in schools, theoretical studies of the effect of the pandemic are absent. Official data on morbidity, general population physical and mental fitness, and physical activity levels are very alarming. You highlight the specific proposals that the European Parliament's Committee on Culture and Education is making precisely in this direction. Could you tell us what specific actions are being taken in our country to deal with the consequences of the pandemic in the area of school sport?

**IV. Evaluation of publications on the dissertation**

The PhD student presents four publications related to the thesis. Some of them have been presented at scientific conferences, which is a sufficient testimonial to the value of the scientific data presented.

**V. Conclusion**

In conclusion, as a result of my own scientific research, I would like to point out that this is an undeniably significant scientific work for theory and practice. The following arguments justify this claim:

1. A methodological program has been developed, applicable in the extracurricular activities of 15-16 year old students with the aim of improving physical fitness and developing basic motor skills.

2. The results of the study have been made available to the scientific community through a series of publications in the press.

4. I have no joint publications with the PhD student.

5. The remarks made are rather addressed to the refinement of some formulations with a view to their better methodological soundness.

On the basis of the foregoing, I propose with conviction that the distinguished members of the scientific jury give their positive vote for the award of the degree of Doctor of Education and Science to Martin Yordanov in the professional field 1.3. (Methodology of teaching in physical education and sport).

09.03.2023 г. Reviewer:

Assoc.prof. Emil Atanasov, Ph.