

**NSA "Vasil Levski"**

**Department: "Theory of Physical Education"**

# **R E V I E W**

by Prof. Jordan K. Ivanov, Ph.D.

on the doctoral dissertation titled:

**"Improvement of Physical Education in Sports Games  
for Students at the Pre-Gymnasium Stage"**

For the acquisition of the educational and scientific degree of "Doctor"  
in the Professional field 1.3. Pedagogy of Education in ..., doctoral  
program "Physical Education in the Educational System"

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## **I. Relevance, structure, and content of the dissertation work**

The scientific problem examined, investigated, and analyzed in the dissertation work is highly relevant and socially significant because it corresponds to and determines the formation and upbringing of adolescents as individuals in a delicate and complex transitional period of biological development and maturation of the targeted social group, students in the pre-gymnasium stage.

The significance is further multiplied by the doctoral candidate's search for and adaptation of new organizational and methodological approaches for implementing the educational process through the specialized variety of sports games, which have a high emotional background, comprehensively develop motor skills, and establish sustainable behavioral patterns for a healthy way of life.

In terms of structural and functional aspects, the work is developed and composed of three chapters, interrelated in a logical sequence, and has a length of 196 pages.

The content includes an introduction, conclusions and recommendations, used literature, and 4 appendices. The bibliography used includes 163 literary sources, out of which 147 are Bulgarian and 16 are in Latin alphabet from 33 foreign authors.

The work is excellently visualized and illustrated with 17 figures, 39 tables, and 16 tables in the four appendices.

The presented development for review fully complies with the accepted and established requirements and practices of the current legal and regulatory framework, and at the moment, there are no identified violations of a formal or other nature, as well as beyond the permissible levels of plagiarism.

### **In the first chapter - Problem Statement,**

The individual subchapters are properly outlined, named, and logically analyzed.

Doctoral student Gruev conducts an in-depth analysis of sports science and researches the theoretical and applied aspects of contemporary trends in physical education in the Bulgarian educational system. Professional studies on the characteristics of education, biological and age-related features that determine its specificity have been examined and implemented.

Through a comprehensive approach, specialized and proven developments by leading Bulgarian authors such as Prof. Buchvarov, Prof. Rachev, Prof. Slanchev, Prof. Dasheva, Prof. Tsolov, Assoc. Prof. Marinov, and others have been sought and utilized, offering possibilities for optimizing the subsystem of physical education among students.

By strategically-balanced selection of the bibliography, professionally and expertly, the examined issues are justified and the developed hypothesis is supported.

Positive assessment also deserves the presented and analyzed sportological characteristics of key concepts from a sport-pedagogical, medical-biological, biomechanical, socio-psychological, and philosophical perspective, such as harmonious physical development, morpho-functional state, variational-automated action, sensitive periods for the development of motor qualities, variability of motor skills, higher skills, anticipation in sports games, etc. The chapter also examines issues related to physical education as a continuous didactic process, involving two main phenomena - growth and maturation, where quantitative accumulations lead to certain structural-functional changes in the bodies of adolescents.

The qualitative measurements of the dissertation are complemented by the examined and cited normative basis of strategically important documents and international acts. I would cite some of them, such as the "National Program for Development 'Bulgaria 2030'", determining the vision and general goals, "Strategic Framework for Education and Training in Bulgaria (2021-2030)", "White Paper on Sport in the EU", "European Charter of Sport", etc.

The conclusion of the first chapter contains observations and assumptions that formulate a well-formulated research thesis, which corresponds to and justifies the developed hypothesis, which is well presented and well-defined in terms of content.

**In Chapter 2** - the aim of the research, the tasks, the methodological orientation, and the organization of the sports-pedagogical experiment are outlined, formulated, and systematized correctly. They correspond to the developed concept for the scientific substantiation of the effectiveness of the proposed specialized author's methodology for improving physical education for students at the middle school stage.

The target group - 98 students from the 6th grade, middle school stage (primary education level) - is suitable for conducting the research. The research project has two experimental groups and two control groups, selected randomly.

The organization of the research goes through four structured and consecutive stages, with a time frame of two consecutive school terms of 40 instructional hours being sufficient for conducting the sports-pedagogical experiment. They have been adapted to the basic didactic principles for teaching and education.

The methodological rigor of the research is supported by the terminology, structure, and content of the sports-pedagogical experiment. The thematic units are logically arranged, and the material-technical conditions and specialized resources are correctly selected and organized for the successful implementation of the experiment.

The used scientific toolkit, including 7 research methods and a battery of specialized, informative, and standardized tests, is suitable for collecting and summarizing empirical data. It is closely related to the theoretical framework of the research and supports the research tasks, the working hypothesis, and the methodological concept of the study.

**In Chapter 3** - Analysis of the Results, the doctoral student presents a comprehensive study with Physical Education teachers, which gives an idea of the content, structural-functional characteristics, and specific features of the educational activities.

Based on professional-expert experience, competence characteristics were derived, summarized, and analyzed.

The analysis is successfully divided by gender, affiliation, and study groups, with all correlation relationships properly presented in a correlation matrix - Appendix No. 4.

It deserves a positive evaluation for the adequately selected mathematical-statistical methods, especially the correlation and variation analysis.

The correlation analysis is applied very well to all 15 tests of the test battery in order to establish dependencies within the groups between motor abilities, technical capabilities, as well as the interrelationships between them. Changes in the correlation structure of motor qualities and skills that occurred under the influence of the applied methodology have been identified.

The statistical significance of differences in the growth rates of the two groups, confirmed with a confidence probability close to the maximum ( $P = 99.1\%$ ), demonstrates the dynamics and specificity of the two sports games primarily applied in the experimental methodology have had a positive impact on the tested results.

I'm glad to note that the obtained empirical data were subjected to mathematical-statistical processing using specialized computer software, specifically IBM - SPSS 26 and Microsoft Excel.

Differences and growth rates in the results of the two groups have been evaluated using the t-test for dependent and independent samples, with a confidence probability of  $P \geq 95\%$ , in order to prove or reject the null hypothesis.

The presented analyses are successfully visualized and professionally presented in tabular, graphical, and color-contrasted forms.

**The conclusions and recommendations** in the dissertation work are well formulated, structured, and professionally articulated.

- ✓ When teaching sports games, the PhD candidate can consider incorporating an educational component that covers the benefits of organized and well-dosed physical exertion with emotional well-being. This can be implemented in the structural-content part or the thematic distribution of the curriculum.
- ✓ Based on the relevance and competence of the PhD candidate, it is recommended to publish an educational-methodological guide that guides teachers and represents a monographic work presenting the sports science aspects and nuances of specialized methodology. This will help optimize the teaching process.
- ✓ The approved and improved methodology can be replicated in other levels and stages of the education system. The PhD candidate can explore opportunities for adapting and modifying the methodology to successfully apply it in other educational environments and systems.

These recommendations provide ideas for the future scientific, applied, professional, and societal activities of the PhD candidate, which can make valuable contributions to the development of the sports education system.

Based on the analyzed results from the exploratory experiment, it should be noted that Master Gruev has successfully defended his research hypothesis and has revealed scientifically substantiated contributions that are valuable for sports science. I can summarize and synthesize some of them as follows:

- **A comprehensive sports science analysis of the school physical education program at the pre-gymnasium stage has been conducted through a systematic and sequential approach. This has enriched the theoretical framework in the field of football and volleyball education and improved the strategy for implementing specialized diversity in the game-based method.**

- **An author's methodology has been developed, tested, and applied in football and volleyball, based on specialized knowledge, the development of higher-order skills, and game exercises in a variable game environment.**

- **Criteria for monitoring and assessing the football and volleyball qualities, knowledge, and skills of students during the implementation of the educational process have been developed and applied through independent specialized external expertise.**

## **Conclusion:**

**The developed study evokes significant interest due to its relevance, innovativeness, and practical applicability.**

**From the conducted comprehensive analysis, it can be concluded that the doctoral work of Stanislav Rumonov Gruev is a fully completed educational and scientific product with specific contributions in terms of its conceptual and methodological dimensions. The doctoral student possesses the necessary qualities to identify, analyze, and interpret scientific facts, processes, and regularities, which gives me grounds to give a positive evaluation and recommend to the esteemed scientific jury to award Mr. Stanislav Rumonov Gruev the academic degree of "Doctor" in the field of Pedagogy of Education in the doctoral program "Physical Education in the Educational System."**