

OPINION

By Prof. Dorothea G. Stefanova, DSc, for the dissertation work of Valentin Yankov Vukov on the topic "IMPROVEMENT OF THE ADMISSION AND CONTROL SYSTEM FOR TEENAGE BIATHLONISTS IN SPORTS SCHOOLS IN THE REPUBLIC OF BULGARIA" for awarding the educational and scientific PhD degree in professional field 7.6. "Sports"

V. Vukov presents himself with a dissertation in the volume of 137 pages with 10 appendices.

Right from the introduction of the dissertation, its relevance stands out: the need to update the system of training of school-aged youth in the field of biathlon, which has been neglected in recent years - a basic prerequisite for achieving proper participation of Bulgaria in the world elite.

The dissertation's views on the problem formulated in this way are presented in three largely independent parts (chapters). **In the first**, a detailed analysis is made of the organization of educational and training work in the system of sports schools and schools. It was found that "the quality of the learning process and the formation of the children's motor skills is chaotic, there is no balance between the children's general education and sports training...". In response to these findings, Mr Vukov rationally substantiates the need to create a "System for monitoring, analysis and control of the activities related to the training of students from sports schools in Bulgaria".

Given that the object of attention is school-aged children, it is fully justified to clarify their physiological features and the bioenergetics of biathlon.

The literature review of the dissertation shows the author's great awareness of the issues of training and adaptation processes, but in my opinion, the exposition is too detailed, which is why it loses its focus specifically on the loads in biathlon (for

example, the characterization of muscle fiber types; the relationship between energy expenditure and the developed operating power, etc.). In a number of cases, citations are missing when presenting specific digital data (eg p.39-42).

The second chapter includes a well-formulated goal of the development and the tasks foreseen for its achievement, ensuring its implementation.

The number of boys and girls studied, aged 12-19, practicing biathlon is impressive – 202 in total. They perform precisely described 9 sports-pedagogical tests to determine their general and special work ability. The results were processed statistically by variance and factor analysis. The latter has an important role in the subsequent development of Mr Vukov's "Unified system of sports training in sports schools in Bulgaria".

Chapter three, which in my opinion is the most weighty, is subjected to a critical analysis of the sports-technical test results obtained, showing an average level of development of the special physical fitness of biathlon students, a level that "does not meet the modern requirements of biathlon and does not satisfy the claims of Bulgaria as a world power in this sport". This stimulated the author to develop "a new, modern methodology for the development of motor skills of students from sports schools actively involved in biathlon".

On the basis of precise statistical processing of the experimental data, Mr Vukov presents new, up-to-date normative tables for evaluating the motor abilities of biathlete students in sports schools of both sexes. I value this as a substantial contribution to theory and practice in this age range.

The emphasis of the dissertation's views on the possibilities of optimizing biathlon education and training at school age is the "Unified system of sports training in sports schools in Bulgaria" created by him. It is presented in detail, enthusiastically argued and clearly, with very good illustrations.

I must especially note and appreciate the high quality of the illustrations of the experimental results.

I do not accept the critical remarks regarding our practice of endurance training (p. 104). The actual stimulation of metabolism is different from that noted by the author. The applicability of the preferred Norwegian system in childhood is debatable.

I cannot avoid critical remarks regarding the bibliographic reference, which lacks cited authors (eg P.Janssen; W.Kinderman and others) as well as the presence of authors with inaccurate data (No 6; 14; 49; 67).

My expectations were not met to find the place of shooting training in the proposed system, considering Klechorov's dissertation, showing its greater share in the successful completion of the competition compared to conditioning.

CONCLUSION

- The dissertation submitted for review is up-to-date and fully meets the requirements for the scientific degree DOCTOR.

- A large volume of highly qualified research work has been carried out, at the same time meeting the high standards in this field.

- All results are precisely documented in tables and graphs, accompanied by the necessary statistical processing.

- The conclusions correctly reflect the experimental results.

- Significant results and contributions have been achieved both for theory and especially for practice related to the optimization of the training process in biathlon.

- The presented independent publications are directly related to the topic of the dissertation work.

- The work poses a number of questions that can be the subject of future developments.

- All legal requirements for obtaining a doctoral degree have been met.

Based on everything that has been said, I will confidently support the candidacy of Valentin Yankov Vukov for awarding him the educational and scientific PhD degree in professional field 7.6. "Sports".

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