

RECENSION

by Assoc. Prof. Ognyan Tishinov, Ph.D.

Subject: The dissertation of Elena Pirinova Durchova, PhD student in self-study at the Department of „SNOW SPORTS“ at NSA "Vasil Levski", on "OPTIMIZATION OF SHOOTING TRAINING" educational scientific degree "Doctor" in the scientific specialty "Theory and Methodology of Sports Science", Professional field 7.6 "Sports", research supervisor Assoc. Prof. Krastyo Zgurovski, Ph.D.

The dissertation examines the sports-competitive aspects of biathlon, the methodology for the preparation of biathlon athletes, their age characteristics, structural determinants and features of this process. The chosen topic is relevant due to the improvement of sports and technical skills and comprehensive assessment of the factors influencing the training of biathletes, through which it is possible to achieve their mastery in training and competition. The topic is interesting, practical and dissertable.

The dissertation has a volume of 127 pages. Its structure includes: (1) introduction and conceptual formulation of the researched problem, five subchapters referring to the first chapter within 74 pages, second chapter referring to the defined goal, tasks, organization and methodology of the research in three pages.

Chapter three includes results, analysis of results within 33 pages. The literature is in the volume of 100 sources, of which 84 are in Cyrillic. To present the results of the research, 8 tables and 43 figures were used in the dissertation. The conclusions are in 7 points and 5 recommendations. Appendices to the dissertation are presented.

The dissertation offers many scientific tasks, answers a number of questions about the peculiarities of competitive training and evaluation of athletes during the competitive period. Shooting technique, the influence of physiological indicators on aiming and shooting, general factors - material and technical, anthropometric requirements, physiological, psychological and meteorological features of biathlon are described in detail. As the dissertation topic is related to adolescent athletes, there is a place for age peculiarities. The in-depth work of the dissertation is evident in the multifaceted detailed description of technical skills.

In the chapter literature review the specifics of motor actions, age peculiarities in the development of physical qualities and the organization of the training activity according to the theory of sports training are considered in great detail. The dissertation is well illustrated tabularly and graphically. All theoretical aspects of sports training are presented in detail and comprehensively from the point of view of the theory of sports training.

The high requirements for the athlete's psychomotor skills must be taken into account, which must be expressed in good lateral equilibrium stability given the impact of inertial force on the athlete's body during competitive gliding during the running distance. When firing, the stability of the weapon when firing is a priority. The personal position of the doctoral student is well shown, which is expressed through his personal opinion, commenting on the cited publications shown in the literature.

In Chapter Two "Purpose, tasks, organization and methodology of the study is shown :

The stated goal is clearly defined. The tasks consistently emphasize the in-depth work in the research to achieve the goal.

The used tests shown in the methodology and the mathematical - statistical methods are described in detail.

The methodology of the research examines in detail the influence of cognitive exercises with a purely psychological focus on testing the qualities of attention in adolescent athletes.

Their training is skillfully included through the "Scat" simulator for shooting training.

A comprehensive survey was conducted on the importance, means and methods of shooting training aged 9-11 years.

The selection of available means and methods for initial shooting training for 9-11 year olds is left in the chapter "Results and analysis" for introduction to the subject. The specific results of the longitudinal study with the „Scat“ system during the year are presented in the chapter "Results and analysis".

The application of cognitive exercises with a psychological focus are correctly placed in the chapter "Results and analysis". The exercises of the proposed system train memory, attention, brain speed, human skills and intelligence. They become more difficult if the participant does well, and easier if there is difficulty. Each exercise adapts to the speed of overcoming. The personalized designed coaching function continuously measures the participant's performance and selects appropriate exercises.

The technical work of the competitors is aimed at the use of computer screens, for which it is very important to be responsible for the brightness, contrast and color characteristics of the real training and competition lighting, which contains mostly white light. The application of cognitive exercises is done during the preparatory time period. The tests overlapping the period were conducted at the beginning and end with the help and expertise of a licensed psychologist. The results obtained for the positive growth are statistically significant, according to the achieved limit guarantee probability, which is positive for the work performed

The sports-pedagogical evaluation of the training was made using the laser system for aiming and evaluation of sports results, called "Scat". This is the most common evaluation system, widely used in shooting practice and is a modern technical tool for training and eliminating possible mistakes in training. The doctoral student has achieved statistically significant results, reflected in tables by the increase and the guarantee probability in the considered one-year time period, thus completing the longitudinal nature of the applied year-round methodology for training athletes.

The recommendation to include in the dissertation information about the meteorological conditions in competitive conditions and their positive or negative impact on the achieved results has been fulfilled. The conclusions are precise. The abstract meets the requirements.

The analysis has a number of creative aspects and was conducted with reasonable criticism from the position of a trained specialist. Scientific research provides answers to the questions posed in the dissertation. The derived working hypothesis corresponds to the guidelines of the review.

The conclusions and recommendations are specific and logically follow from the results obtained and the analysis made.

In my opinion, the theoretical and scientific-applied contributions of the dissertation are the following:

1. A comprehensive literature review and statement of the issue presented in the topic of the proposed dissertation has been made.
2. A detailed year-round study of an elite group of athletes from a competitive and psychological point of view has been made.
3. The used sports pedagogical methodology satisfies the fulfillment of the set task in the dissertation.

I give a positive assessment of the dissertation of Elena Pirinova Durchova, PhD student in independent training at the Department of "SNOW SPORTS" at NSA "Vasil Levski", on "OPTIMIZATION OF SHOOTING TRAINING" and I propose that she be awarded educational scientific degree "Doctor" in the scientific specialty“ Theory and Methodology of Sports Science ”, professional field 7.6“ Sports ”.

February 14, 2022

Signature:

(Assoc. Prof. Eng. Ognyan Tishinov, Ph.D.)