

S T A N O V I S H E

For Todor Minkov Todorov's doctorate on the topic **Methodology for physical training of workers using rope access** for obtaining the educational and scientific degree "Doctor" in professional direction 7.6 - Sport, doctoral program "Theory and Methodology of Sports Science".

Research supervisor - Associate Professor Alexander Shopov - doctor.

Prepared the opinion: Associate Professor Anton Hizhov - doctor

The dissertation work of Todor Todorov submitted for opinion has a volume of 140 standard printed pages, including a literature review and appendices, and is structured in an introduction, 4 chapters, references and appendices. The literature review includes 36 literary sources, of which 18 are in Cyrillic, 7 are in Latin, and 11 are internet sites. The development is well illustrated with numerous tables, graphs and diagrams.

At first glance, the small number of literary sources makes an impression, which is easily explained by the fact that, until now, the problem of training workers through rope access has been too little developed and researched, both from the point of view of the psychophysical training of workers and from on the legal basis regarding health and safety at work.

The presented development treats and develops a rather significant problem of rope access workers. It is caused by the lack of the required amount of ktompetencies /knowledge, skills, necessary level of physical preparation/ which is expressed in a significant number of contusions, accidents and traumas of the rope access workers. This and the significant contribution of the development characterizes it as dissertable and represents a contribution to the rapidly developing profession of rope access workers.

In the first chapter "Statement of the problem" on 48 pages, the doctoral student presents us with the problems of historical development, the influence of the development of technologies and presents a psychographic characteristic of the profession. Further, he makes an anatomical analysis of the movements when working "from a rope" as well as a review of the programs and methodologies for physical training in the field of high-altitude technologies. The review of the types of training according to some of the systems /APAC and IRATA/, as well as the analysis of some problems of the training process logically lead the doctoral student to the formulation of working hypothesis that the purposeful application of an experimental methodology for physical training will contribute to the development of certain motor abilities of rope access workers, which are necessary for the correct and safe implementation of the work process.

In the second chapter, it is formulated with the title "Aim, tasks, organization of the study and methodology for physical training". Here, my personal opinion is that it would be more correct and comprehensive if the chapter was named "Methodology, methods and organization of the research". Here are my arguments - in sports science, the methodology contains the following basic constructs: goal, tasks of the research, subject, object and subject of the research.

The purpose of the development is formulated clearly and comprehensively, and corresponds to the theme of the development.

The tasks of the research are formulated precisely and are sufficient to achieve the above goal. On this basis, the doctoral student formulates the object and subject of the development, which are precisely formulated.

The methodology of the research is correctly chosen, and the used tools of methods and tests are completely sufficient for the

achievement of the set tasks, and the correct and comprehensive analysis of the results, which is also evident in the chapter dedicated to the analysis of the research results. The used test tools are described in sufficient detail. The PhD student is fluent in a wide range of research methods, which she knows in detail. The research contingent includes 42 people, selected according to certain criteria.

The organization of the study took place in four main stages in the period 2019-2021.

Logically, the chapter ends with the presentation of the author's development of "Specialized methodology for physical training of workers using rope access". The methodical units of the training and the stages through which it passes are specified, the type of exercises, the number of repetitions and the rest times between the series and the periods of their application are described in detail. The developed methodology represents the main scientific contribution of the doctoral student. My remark here is that it would be more correct to call the methodology "Experimental specialized methodology..." However, this does not reduce the significant contribution of the methodology. In the "Results and Analysis" chapter, the data from the conducted research and scientific experiments are described in detail, correctly and in sufficient depth, and comprehensively analyzed and illustrated through tables and graphs, so that the doctoral student can reach correct conclusions related to the results of the research.

On the basis of the statistical methods used, the doctoral student's working hypothesis has been reliably confirmed to a large extent, namely that "the targeted application of the experimental methodology for physical training will contribute to the development of certain motor abilities of rope access workers,

which are necessary for the correct and safe implementation of the work process”.

The development is well illustrated with numerous tables, diagrams and figures, which help to get a better and detailed insight into the results obtained from the research.

In the chapter "Conclusions and recommendations", Todor Todorov, based on the analysis of research data, formulates conclusions and recommendations for future work, which cover the set tasks of the research and have a significant practical contribution to the future preparation and safe work of people working by rope access.

The presented abstract is prepared according to the requirements and presents the dissertation work of the doctoral student in a concentrated form.

Everything stated up to here gives me reason to recommend to the members of the esteemed scientific jury to award the doctoral student Todor Minkov Todorov the educational scientific degree "Doctor" in professional direction 7.6 - Sport, doctoral program "Theory and Methodology of Sports Science".

Prepared the opinion:

/ Assoc.prof. A. Hizhov, Ph.D./