

REVIEW

Dissertation thesis entitled: "Experimental model for the development of speed capabilities in 17-18 year old football players" with the author Yavor Yordanov Valchinov for obtaining the PhD in the professional field 7.6. Theory and Methodology of Sports Science".

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The topic chosen by doctoral student Yavor Valchinov is important and significant and is related to streamlining and improving the process of sports training with 17-18 year old football players. An attempt is made to create and implement a complex model for preserving and developing the speed capabilities of football players in these ages through conditioning means, technical-tactical exercises of speed, while also observing the principles of two-cycle periodization for the football game with the corresponding load.

The dissertation is 200 printed pages long, including 43 figures and 24 tables. Pages 201 to 229 in the appendices present the questionnaire and its results in percentages as well as the detailed experimental design.

In terms of structure, the paper is generally structured according to the classical requirements and includes an introduction, three main chapters and subchapters, conclusions and recommendations and a literature review.

It should be noted that the total of 200 pages is too extensive , it should be no more than 130-140 pages.

A total of 196 literature sources (92 in Cyrillic and 104 in Latin) were obtained and cited for the preparation of Chapter I "State of the art in literature sources".

Based on the research of a number of authors , Ph. Valchinov rightly notes and comments that the quality rapidity is directly related to the genetic factor and the development opportunities are limited in age aspect. The additional factors for

preservation and development of types of speed in 17-18 years old football players such as, : environment(quality of terrain, weather conditions, additional aids) , physiological factors (muscular strength, flexibility, technique of types of running, anaerobic capacity) and psychological factors (in negative or positive aspect) are pointed out and analyzed.

In this part of the dissertation, the author has systematically and thoroughly studied the research of a significant number of specialists and has personally noted his opinion on :

- ✓ Features of manifestation of the motor quality speed.
- ✓ Specificity of speed manifestation in football.
- ✓ Approaches and methodologies for developing speed in football.

Through the working hypothesis Yav. Valchinov reasoned and based on the modern realities of speed and strength development in 17-18 year old football players, directs the scientific search and research in the creation of an experimental method with specific means, methods and approaches for progressive increase of their speed capabilities.

The main objective is clearly and precisely formulated and follows from the hypothesis presented. The 5 main tasks are stated in chronological order.

The subject of the study was the development of speed capabilities in 17-18 year old soccer players. The application of the experimental model within 6 months is defined as the object of the study and the degree of changes in speed actions .

A total of 29 players in the age group (17-18 years) from PFC Lokomotiv Sofia and Football Development Academy participated, divided into control and experimental groups respectively.

The experimental design included 24 sessions with the AFR players focusing on quick orientation, psychomotor skills and technical actions. For the preparation of the specialized methodology, 4 main factors and on this basis the parameters mainly in 5 directions are indicated.

The dissertation was elaborated during the period from late 2021 to August 2024 in four phases. 5 classical scientific methods were used.

For the medical-biological and sports pedagogical testing, 18 control norms controlling and assessing physical development, dynamic strength, explosive power, speed and psychometrics were specified and used.

A survey of 53 coaches all with current licenses and at 4 levels gave their opinions on 16 questions. The important question "At what age is it advisable to start developing speed abilities?" was answered correctly by the coaches in total in both ages 10-12 and 13-15 - 94,3%.

It is not clear why a matching 12-14 year-old level is included with the above response of only 1 coach ? "(Figure 13)". Quite disconcerting is the general view of coaches that not enough work is being done in the CJS for speed above 90%. The questionnaire includes important questions about priorities in training for types of speed, the first step, the position at the start and the role of the counter step.

In summary, it should be noted that the PhD student Yavor Valchinov, on the basis of the wide range of responses, identifies underestimating of the work for speed and knowledge gaps. This is the main reason to work on the creation of a specialized methodology for the development and improvement of the speed potential of 17-18 year old football players.

A precise anthropometric study and analysis of the parameters of the players of the experimental group was performed. Based on the analysis of variance, the physical development of the participants was found to be good for height and weight and unsatisfactory for percentage of body fat. Interesting results were obtained in the study of somatotype - determining the shape of the human body, such as:

- ✓ Fatness or skinniness (endomorphy)
- ✓ Musculoskeletal development (mesomorphy)

✓ Elongation of body segments (ectomorphy)

The doctoral student also made individual somatotype estimates according to the game postures of the individuals studied.

As a significant contribution to practice we should point out the consequence of the statistical processing of the published norms of physical development indicators of football players in the ages 16-17 years (Tables 5 and 6).

The results obtained from the sport-pedagogical measurements (14 tests) by the analysis of variance provide an estimate of the initial condition of all the subjects (Table 7) of the experimental group. The second study gives a real opportunity to evaluate the realized increases and changes by the participants of the experimental group on the basis of the specific targeted methodology for the development of the types of speed without and with point (Table 8). Tables 9 and 10 show the results of the control group.

In summary, high levels of homogeneity were indicated in 11 of the test checks, particularly in the 1- and 2-legged rebound heights and the congruent speed. The accurate mathematical-statistical treatment performed in this part of the work with the Student's t criterion and Pearson's correlation coefficients enables the Ph. Valchinov to trace the changes in the correlation structure of the motor tests and to prove the positive impact of the prepared and implemented complex methodology for increasing the speed abilities of 17-18 years old football players.

A contribution to practice is the correlation analysis of results performed separately for the EG "start of experiment, (Fig. 40) and end (Fig. 43)", as well as for the CG at the start (Fig. 42 and end Fig. 43). Thorough competent expertise is the author Yav. Valchinov's reason to determine the guidelines for the training influences on the basis of the established correlations between the special physical qualities, technical-tactical and psychological qualities.

Overall, the dissertation is illustrated with a significant number of tables and figures supporting the textual part.

The conclusions (6) and recommendations (4) stem from the survey and research work carried out. The same extensively formulated and the logical sequence in the construction and preparation of the dissertation has been observed.

We can summarize the following contributions of the paper to practice.

1. An in-depth and specialized study of the literature has been carried out with very important factual information on the intensification of types of speed as a crucial quality for the competitive process in football.
2. The questionnaire study identified gaps in the theoretical-methodological and practical training of coaches and provides important guidelines in the training process for the types of speed, the first step, the starting position at the start and the role of the counter-step.
3. The anthropometric study provides objective data on the physical development, body fat and somatotype of the participants. By statistical processing, norms of anthropometric indices were published.
4. The experimental design of 24 training sessions with content, duration and dosage is presented in detail.
5. A pre-test battery with specific exercises for SFA and Techno-Tactical and Psychological Abilities was used. A precise mathematical-statistical analysis was performed to prove the effectiveness of the experimental model in enhancing the speed qualities of 17-18 year old soccer players.

To the author we would further suggest the following:

- ✓ The sport-pedagogical and psychological research carried out provides a good opportunity for the practice to develop a normative basis.

We have no joint publications with this Ph.D. student. The abstract is in line with the submitted dissertation and meets the requirements. The author Yavor Valchinov has prepared and published 2 articles on the topic of the dissertation.

CONCLUSIONS:

We know the PhD student Yavor Valchinov as a hard-working , disciplined and professionally realized football coach.

The presented dissertation is of the required scientific level, it is his personal work and has theoretical and applied value.

We are convinced and therefore we propose that the Honourable Scientific Jury should award the degree of Doctor of Science to Yavor Yordanov Valchinov in the professional field 7.6. Sport, doctoral programme "Theory and Methodology of Sports Science".

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REVIEWER: Prof. Lachezar Dimitrov