

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Methods Of Training Chess Players Of Higher Sportsmanship.

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ABSTRACT

One of the most polar sports in Russia and the world is chess. According to the World Chess Federation (FIDE), more than 605 million people play chess in the world. The organization and management of the training process in chess in Russia is governed by generally accepted recommendations and the regulatory framework and the federal standard for training in the sport of chess. However, there is no specially developed standard program and generally accepted in the country, which would reflect the specifics of the sport. Experienced trainers, methodologists, systematize and use traditional approaches to presenting work programs and drawing up curricula based on materials formulated by world champions, the strongest foreign and domestic grandmasters. There was a need to create a new version of the curriculum and work programs in connection with the introduction of computer techniques and training technologies in the training process at all stages of training athletes and chess players. From this point on, chess coaches in youth sports schools and their students began to master and apply new technical means of teaching various game, analytical, training information and retrieval chess programs, use Internet resources to view games with high-level commentaries, exchange information or join the online lectures of leading grandmasters on specially designed portals. The appeared author's methods and technologies of training in the computer class, using remote access on servers and portals on the Internet, must be adapted for groups of higher sportsmanship. Now it is necessary to develop a rationale for the introduction of computer technology into the training process with the subsequent updating of the material and technical base and qualitative changes in the training program for highly qualified chess players. In the Russian federal standard of sports training in the form of sports chess, requirements for the structure and content of sports training programs are disclosed. The problem of optimizing the training process of highly skilled athletes-chess players is associated with the technologization of individual components of the training system. The development of the scientific and methodological foundations of the system for training highly qualified chess players in Russia, its intensity and recommendations for recovery in the preparatory, competitive and transitional periods require further improvement.

Keywords: athlete training, chess training, computer technologies, physical training of chess players, psychophysical qualities, chess.

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INTRODUCTION

The functioning of the body is a complex process [1,2], which is determined by various biological mechanisms [3,4], which are under the influence of external [5,6] and internal factors [7,8]. Rational sequential stimulation of various vital parameters can lead to an increase in the level of fitness of various mechanisms [9,10], organs [11,12], of the organism as a whole [13,14] with significant overall recovery [15,16]. This approach is successfully and actively used in the treatment of [17,18], rehabilitation [19,20] and in the training of various categories of professionals and athletes [21,22]. He allowed to achieve the best results regardless of age [23], initial health [24] and sport [25].

The training process in chess is divided into general and specialized training, interconnected [26,27]. The focus of general training is expressed in a comprehensive chess education and the development of certain abilities of an athlete-chess player [28]. The focus of special training is determined by the degree of mastering the respective competencies and their further improvement based on general training [29]. With the advent of new computer-based training methods for chess players, the training process has accelerated significantly, which contributed to the development of special qualities among chess players [30,31].

The main forms of sports training are: group and individual training and theoretical classes [32], work on individual plans, training camps, medical rehabilitation activities, testing and control [33,34]. At the stage of higher sportsmanship of sportsmen-chess players, individualized training with the intensive use of special computer programs and the Internet: teaching, analytical, gaming, information retrieval systems, chess portals and websites [35] is of particular importance. Equally important is the use of the whole complex of modern methods and technologies of training for the sport of chess [36,37].

The factors initiating the development of a chess player's abilities and the growth of achievements should be stimulated by a sports or educational organization that ensures a comprehensive achievement of a high level of technical, tactical, psychological, physical, and functional training based on an individualized approach [38]. Particular attention in the organization of the process of training athletes chess players at the stage of higher sportsmanship should be paid to the age and psycho-physiological characteristics [39,40].

For the successful growth of achievements and optimization of the training process of a chess player at the stage of higher sportsmanship, as well as to determine the volume and influence of individual components of the chess player training system, a number of points are needed. Schedule performances at competitions should be planned and the structure of training and sports camps [41,42], preparatory and control tournaments in the annual period should be optimized taking into account interrelated types of training [43]. It is necessary to actively develop and form in an athlete motivation for cognitive and productive activity based on an individualized training model [11,44]. It is necessary to create a group of coaches constantly involved in the training and competitive process for the most promising and talented athletes and chess players with the separation of the specialization of these coaches: finding the necessary information about an opponent, developing new opening schemes and options, systematic physical, psychological and functional training. Adjustment of training and competition periods in the annual cycle is also required, depending on the conditions presented by the organizers of the competitions and tournaments to meet all the requirements of the organization of the training process and performance at competitions according to the Federal standard of training in the Chess sport.

The purpose of the study is to develop a methodology for training chess players at the stage of higher sportsmanship and test its effectiveness.

MATERIALS AND METHODS

The conduction of the research was approved by the local Ethics Committee of the Russian State Social University in May, 15th, 2017 (Record №5).

The study was conducted in 2017-2018 on the basis of the Anatoly Karpov chess school, Moscow, Russia. The work recruited a control group (24 people) and an experimental group (20 people) from among the athletes who passed the checkpoint standards and enrolled in September 2017 in the groups of higher sports skills, approximately equal in level of the game.

For the experimental group, an individualized training methodology was developed during the preparatory period, the forms of training sessions and rehabilitation tools were defined, which included: solving a set of tasks in strategy and tactics, individual selection of opening options and schemes, training batches (with classical control), training training camps (10-14 days, 2 times per year cycle, depending on the calendar of competitions), general and special physical training, a complex of psycho-regulating exercises d by the method of J. Schulz. The control group was engaged in a sports training program for groups of higher sportsmanship.

Control and translation standards were carried out through special tests on strategy and tactics. The method of chess testing was the main diagnostic method for assessing the level of mastery of chess equipment (knowledge of typical attacks, strategic motives, positions and the ability to use them). The selection of tasks for the tests mainly used materials from the list of sports training programs in accordance with the Federal standard of sports training for the sport of chess for groups of higher sports skills. Check standards - 10 positions, the maximum you can score is 10 points, one position - 1 point. Test - 10 positions in the classroom and 5 positions.

For the purpose of psycho-regulation of the state of chess players during training and competitive activity, an autogenic training method was used according to I. Schulz, whose technique consists of a series of exercises that cause positive emotions in a person, relaxes him, helps control his physical and psychological state. For the successful operation of this technique, the following parameters were observed: 1) personal motivation; 2) try to maintain the desired body position; 3) do not be distracted by external stimuli; 4) focus on internal sensations.

RESULTS AND DISCUSSION

In the course of the study, in both groups two tests were carried out and two control and translation standards were passed, giving information to the trainer about the level of pupils' assimilation of tactical and strategic ideas in accordance with the program material. Differences were identified not only within the groups for each athlete-chess player separately (as a result of training in the annual cycle, the testing indicators improved in the control and experimental groups), but also between the groups. This indicated that different teaching methods had a different impact on the test scores. For clarity, with the results of tests in both groups in the annual cycle we consider in table 1.

Table 1: The average values of test results in the control and experimental groups in the annual cycle

Groups	The average values of control measurements (tests)							Δ increments%
	№ 1	№ 2	№ 3	№ 4	№ 5	№ 6	№ 7	
Experimental	4.3	7.1	9.2	9.3	9.6	9.9	9.7	125.5
Control	4.4	4.2	4.4	5.2	4.7	5.6	6.5	47.7

The growth rate of the FIDE rating of chess players in the experimental and control groups during the year when the experiment was conducted is presented in Table 2.

Table 2: The growth rate of the FIDE rating of chess players in the experimental and control groups during the year

Groups	Rating October 2017	Rating April 2018	Δ increments (paragraph, %)
Experimental	2217.2	2347.4	130.2 paragraph(6.2%)
Control	2219.2	2254.1	34.9 paragraph(1.5%)

Testing, which was conducted once a month, as well as indicators of control and translation standards, showed a better mastery of the skills obtained and better results among students of the experimental group. Sports indicators for the growth of individual ratings at the end of training were also higher among experimental group athletes.

The proposed method of general and special physical training of highly skilled chess players in the framework of the study was based on the principles of: 1) the gradual increase and the wave-likeness of physical activity volume; 2) compliance with the dosage of physical activity in accordance with the Federal standard of training in the sport "Chess"; 3) achieve the level of influence of at least 50% of the basic physical qualities of physical fitness (endurance and coordination) of the general physical training in the preparatory and competitive periods; 4) taking into account the individual preferences of the variable part in choosing the type of motor activity of athletes-chess players; 5) the unity of medical and pedagogical control and self-control. The achieved level of physical qualities and functional state in the process of physical training in the training and competitive periods of the mesocycle in the experimental group at the end of the experiment revealed the dynamics of indicators by 23.0% from the initial level.

In the author's methodology of the system of training chess players at the stage of higher sportsmanship, autogenic training was used according to I. Schulz. The dynamics of changes in psychophysiological indicators during the pedagogical experiment in the experimental group are presented in Table. 3

Table 3: Dynamics of indicators of psycho-physiological qualities in the experimental group

Psychophysiological quality (units, scales)	Control points						
	I	II	III	IV	V	VI	VII
RAM size (n, number of objects)	7.0±1.6	7.0±1.8	8.0±2.4	9.0±0.6	10.0±2.1	11.0±1.1	11.0±0.8
Speed and attention span (n, number of points on the scale)	7.1	7.3	8.0	8.0	8.2	7.9	8.3
The level of abstract logical thinking(n, number of points on the scale)	84.0	93.0	102.0	108.0	106.0	113.0	121.0

As a result of the use of autogenic training for I. Schulz during the pedagogical experiment, the dynamics of psycho-physiological indicators at the end of the experiment were: the amount of RAM 57.0%, the speed and volume of attention 16.0%, the level of abstract logical thinking 44.0%.

The results confirm the well-known thesis about the possibility of strengthening and improving the biological structures in the body [45-48] with a systematic balanced training effect on them [49.50]. Improving the functioning of the athlete's brain during the application of the author's training scheme undoubtedly ensures greater biological reliability of the body being trained [51,52], in particular the brain, which ensures greater efficiency of its work [53,54] in the form of activation of psychophysiological characteristics during chess games.

CONCLUSION

Developed and implemented in the educational process of the junior sports school A.Ye. Karpov, Moscow, the author's method of comprehensive training of athletes and chess players experimentally proved its effectiveness in terms of individual chess training for youngsters aged 15-17. The results of the study convincingly prove that it is possible to improve the level of training of chess players at the stage of higher sportsmanship if you effectively apply a comprehensive training system using computer technology in combination with physical and psychological means of training during training and competitive periods.

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