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## Individualization Of Technical And Tactical Training Of Chess Players At The Stage Of Higher Sportsmanship.

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### ABSTRACT

The International Chess Federation is united by the motto "Gens unasumus" (Together we are one family) and one of the most popular sports in the world. The mental activity of a chess player has a brightly emotional sporty coloring. According to the classification of sports activities, chess belongs to the abstract-game sports, the outcome of the struggle which is achieved with the help of the abstract-logical play on the opponent, and not a demonstration of the athlete's motor activity. This feature of chess has a great influence on the system of sports training, developing special technical and tactical chess training, unlike sports with high motor activity, general physical training is aimed at developing general endurance and achieving a certain functional state of a chess player during training and competitive periods. The program of training chess players at the stage of higher sportsmanship provides for the organization of the training process without restrictions. This ensures a unified orientation of the training process in the long-term plan of preparation and improvement of sportsmanship. The emergence of new computer methods for training chess players has greatly accelerated the process of preparation. The use of computer programs contributed to the development of special qualities among chess players. The famous chess player and coach M.I. Dvoretsky created a program that improves the algorithm of thinking over moves, develops skills and abilities that help simulate a position in training and understand the similar situation behind the board in a game. The program is developed on the basic principles of training athletes, chess players, takes into account research data and the progressive experience of competitive practice. The need for individualization of technical and tactical training in the training process of athletes-chess players, associated with the technologization of individual components of the training system, especially in demand at the stage of higher sports skills. The development of the scientific and methodological foundations of the chess player training system, its intensity and recommendations on the organization of technical and tactical training in the preparatory, competitive and transitional periods remain insufficiently illuminated. To raise the level of technical and tactical training of chess players at the stage of higher sportsmanship, to achieve high sports results, perhaps, if we apply an integrated training system using individualized modern computer technologies, special tools in training and competitive periods.

**Keywords:** athlete training, chess player training, computer technologies, comprehensive chess player training, chess.

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## INTRODUCTION

Receiving pronounced phenotypic manifestations in any body system is always based on a favorable genetic program [1-3] and with optimal environmental effects on the body [4-6]. This is also true for biological objects [7,8] and for a person engaged in various types of activity [9,10]. Very clearly this can be traced to the athletes, regardless of the sport [11,12].

At the stage of higher sportsmanship, the training system involves the organization of an individual athlete training plan [13]. 70% of the volume of hours is allocated to individualized training. Modern planning ideas in the annual cycle of preparation suggest the presence of a certain structure of microcycles, mesocycles and macrocycles [14]. From 2 to 10 training sessions, in conjunction with the recovery, can be relatively complete, repetitive fragments of the overall structure of the preparation process, which define the microcycle [15,16]. Usually, the duration of the microcycle is one week, 7 days [17]. In individual sports, in practice, there are 4-9 types of microcycles: preparatory, basic (general training), control preparatory (modeling and special preparatory), retractor, competitive and recreational [18, 19]. Depending on the direction of the training effect in sport, it is common to distinguish the blocks for the compilation of the weekly microcycle: formative tactical, developing technical, control, supply, competitive, recovery [20,21]. The individual approach is in demand in the structure of the annual cycle preparation system and provides for 1 or 2 macrocycles, in correlation with the calendar of competitions [22].

The process of sports training of highly qualified chess players is aimed at the maximum training loads combined with the schedule of individualized competitive practice [23]. It is necessary to improve technical and tactical skills in conditions as close as possible to the mode of competitive activity [24,25]. At this stage, further detailing of the debut repertoire takes place [26]. The ability to play the most difficult mid-game positions is developed [27]. The totality of general physical training is used not so much for the purpose of improving physical qualities, but mainly as a restorative or stimulating restorative preparation of training during peak competitive and training loads [28,29]. Training sessions in the annual cycle are classified into preparatory, competitive and transitional recovery periods [30].

The principle of the game features of an athlete, the goal and objectives at the stage of higher sportsmanship determine the long-term preparation of sports and technical indicators, the volume and intensity of training loads, the number of competitions, the use of basic training tools [31]. The individual perspective plan contains certain indicators of technical and tactical training, outlined by the coach and the athlete based on previous training experience, analysis of the individual abilities and qualities of the athlete [32]. Currently, there is an increase in the volume and intensity of the training process [33,34]. This causes the need to plan and carry out effective measures to speed up the process of restoring the body of an athlete-chess player and improve its performance, prevent overvoltage and other health problems.

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

## MATERIAL AND METHODS

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

For the experimental group, an individualized technical-tactical training methodology was developed during the preparatory period, the forms of training sessions and rehabilitation tools were identified, which included: solving a set of tasks for strategy and tactics, individual selection of opening options and schemes, training games, preparatory tournaments, training- training fees (5-8 days, 2 times a year, depending on the calendar of competitions). The control group was engaged in a sports training program for groups of higher sports skills, in accordance with the requirements of the federal standard of training in the Chess sport.

**RESULTS AND DISCUSSION**

It is known from chess practice that at the stage of higher sportsmanship one of the main tasks is preparation and successful participation in competitions. Therefore, special attention was paid to individualization and improving the reliability of equipment in the extreme conditions of competitive activity.

The program of each training session consisted of 4 sections:

- 1) The preparatory stage of the development of techniques and methods of independent work with the information retrieval system "Chess Assistant", "ChessBase", chess databases, training and gaming programs;
- 2) Studying the sections of chess theory (chess tactics and combinational wrestling, non-trivial methods of playing the endings - with examples of etude creativity, theory and practice of playing individual debuts), as well as studying the work of outstanding chess players. All these opportunities are implemented in the relevant chess programs;
- 3) The use of the electronic database "Thinking schemes" for the development of the strategic skills of the subjects;
- 4) Training on game programs to consolidate the acquired knowledge and skills of the tested athletes.

In the annual cycle of training experimental chess players, intermediate stages of control were included. A practical test of the dynamics of the development of sportsmen’s skills was held in competitions that are of fundamental importance in the sports biography of these chess players. From teaching practice it is known that the results of intensive intellectual exercises give a practical result in about 5-6 months. For this reason, the annual training cycle was divided into 4 parts. In addition, a certain assessment of the preparedness of a chess player and his growth was provided by solving test tasks on a personal computer in the programs CT-ART 5.0, Chess Strategy, Encyclopedia of the Middle Game I, II, Encyclopedia of Debut Errors, Chess Etudes, Endgame workshop.

**Table 1: Test results at intermediate stages of preparation**

Programs	I	II	III	IV
«CT-ART 5.0»	60	70	80	90
«Chess strategy»	40	55	70	85
«Encyclopedia MittelspielI»	30	50	65	85
«Encyclopedia MittelspielII»	30	50	65	85
«Chess Etudes»	30	50	65	85
«Endgame practice»	30	55	70	90
«Encyclopedia of debut mistakes»	60	70	80	95

Analysis of the results of testing of athletes who have reached the level of the FIDE master in chess showed that a certain level of growth of results is needed to achieve the goals of the annual training cycle at the stage of higher sportsmanship. The necessary approximate growth of such test results of chess players is given in table 1. From the data in table 1 follows this pattern: during the 3-4 months of training according to this method there is no sharp increase in athletic performance, and the next 5-8 months, and further rapid growth in sports success and as a result, a sharp increase in the ELO rating. This can be explained by the fact that retracting microcycles are characterized by the accumulation of knowledge and the polishing of acquired skills, the greatest jump in results occurs at the end of the year of training [35].

Let us give a detailed example of the results obtained. The first student who complied with the standard of an international master for 2.5 years, according to this method, was V.V. Evalev. At the time of the start of the computer class, the schedule of classes for one week, at the rate of 4 academic hours per day, was 24 hours per week. In the general case, the load is an increased value of functional activity compared with dormancy, which is introduced by the exercise [36]. The basis of playing chess, as in other sports, is exercise. The highest stage of a student's preparedness for competition is mastering free relaxed thinking when playing at the board, the ability to withstand training and competitive loads [37].

As you know, the load is characterized by volume, intensity, duration and diversity [38,39]. According to this author's method of individualized technical and tactical training, the load was variable in nature at each training session. The motor density of each training session was over 80%. Individual classes were planned taking into account style, tournament results and perspective tasks. The basis for the use of programs was laid down the themes outlined earlier. The complexity of the solved examples increased on an increasing scale from 10 (beginner) to 90 (masterful, grandmaster level) points. According to the experimental method, his professional characteristic was immediately written. The tasks for athletes at the stage of higher sportsmanship in the training process in the annual cycle were formulated and solved:

- 1) Short-term - fulfill the standard of the FIDE master and achieve the individual ELO coefficient - 2300 units during the year (10 people, 50%);
- 2) Medium-term - achievement of an individual ELO ratio - 2400 units; at the end of the year and the implementation of the norm of the international master FIDE (5 people, 25%);
- 3) The long-term goal was to fulfill all the norms of the international FIDE master and achieve an individual ELO ratio of 2450 units at the beginning of the next annual training cycle (5 people, 25%);

### CONCLUSION

As a result of research, a method of individualized technical and tactical training of highly skilled chess players, based on the use of chess computer programs, Internet resources and the electronic database "Thinking by schemes", was developed and introduced into the pedagogical process. The analysis of the research results confirms that the methodology based on the use of new computer technologies in the training system increases the intensity and increases the productivity of classes in the development of strategic and tactical chess material. It successfully solves the problem of mastering the technique of calculating options, allows for an accurate diagnosis of the status of a chess player, increases the interest of athletes in the work on mastering chess mastery.

### REFERENCES

- [1] Safiulin EM, Makhov AS, Mikhailova IV (2016) Analysis of the factors impeding the development of skill and the number of chess players with the defeat of the musculoskeletal system during the initial sports training. Theory and practice of physical culture. 4: 33-35.
- [2] ZavalishinaSYu. (2019) Functional Activity Of Vascular Hemostasis In Calves Of Plant Nutrition. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1957-1961.
- [3] Bikbulatova AA.(2018)Functional Features Of Microcirculatory Processes In Obese Women AgainstA Background Of Long Daily Wearing Of Corrective Clothing. Research Journal of Pharmaceutical, Biological and Chemical Sciences.9(6) : 785-793.
- [4] ZavalishinaSYu. (2019) Physiological Features Of The Rheological Properties Of Erythrocytes InCalves During The Dairy-Plant Nutrition Phase. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1814-1820.
- [5] Bikbulatova AA.(2018)Creating Psychological Comfort In Women Who Wear Corrective Clothing For A Long Time. Research Journal of Pharmaceutical, Biological and Chemical Sciences.9(6) : 1112-1121.
- [6] Skoryatina IA, Medvedev IN. (2019) Correction of aggregation level of basic regular blood elements in patients with hypertension and dyslipidemia receiving rosuvastatin and non-medicinal treatment. Bali Medical Journal. 8(1) : 194-200. DOI:10.15562/bmj.v8i1.648
- [7] Makhov AS, Medvedev IN. (2019) The Physiological Response Of The Body To The Practice Of Physical Therapy After Spinal Cord Injuries. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 118-124.
- [8] Makhov AS, Medvedev IN. (2019) The Functional State Of Human Sensory Systems On The Background Of Regular Exercise. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 183-188.
- [9] Mal GS, Vorobyeva NV, Medvedev IN. (2019) Physiological Significance Of The Active Muscle Activity Of The Body. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 366-371.
- [10] Makhov AS, Medvedev IN. (2019) The Functional State Of The Joints In Conditions Of Regular Ordered Muscle Activity. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 594-599.
- [11] ZavalishinaSYu. (2019) Functional Platelet Activity In Heifers In Growing. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1723-1727.

- [12] Makhov AS, Medvedev IN. (2019) Regular Muscular Activity In Maintaining The Optimum Of Human Physiological Parameters In Conditions Of Increased Mental Stress. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 625-629.
- [13] ZavalishinaSYu. (2019) Functional Features Of Vascular-Platelet Interactions In Pregnant Cows. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1677-1683.
- [14] Makhov AS, Medvedev IN. (2019) Dynamics Of Functional Parameters In The Post-Stroke Period On The Background Of Active Muscular Activity. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 650-654.
- [15] Alifirov AI, Mikhaylova IV, Fomina SN, Fedchuk DV, Bakulina ED. (2018) The Development Of Intellectual Features Of Students Using A Chess Game. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6) : 106-112.
- [16] Makhov AS, Medvedev IN. (2019) The Physiological Significance Of The Formation And Maintenance Of Correct Posture. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 685-688.
- [17] OshurkovaJuL, Medvedev IN. (2018) Functional Features Of Platelets In Newborn Calves Ayrshire Breed. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6) : 313-318.
- [18] Medvedev IN. (2019) Functional Features Of Erythrocytes In Calves Of Vegetable Nutrition. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1848-1852.
- [19] Makhov AS, Medvedev IN. (2019) Physiological Changes In The Locomotor System During Massage Effects. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 755-760.
- [20] Makhov AS, Medvedev IN. (2019) Basics Of Physiotherapy In Diseases Of The Musculoskeletal System. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 801-805.
- [21] Makhov AS, Medvedev IN. (2019) The Functional State Of The Body With Vascular Dysfunction On The Background Of Regular Physical Exertion. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 869-873.
- [22] Alifirov AI, Chepik VD, Baymurzin AR, Zhalilov AV. (2019) Features Of Psychophysical Training In The Cadet Cossack Corps. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 442-448.
- [23] Makhov AS, Medvedev IN. (2019) The Problem Of Flatfoot And Approaches To Its Solution. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 905-910.
- [24] Makhov AS, Medvedev IN. (2019) Functional Features Of The Nervous System In The Context Of Regular Physical Education. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 961-966.
- [25] Medvedev IN. (2019) Weakening Of Platelet Activity In Patients With A High Degree Of Arterial Hypertension In The Metabolic Syndrome Who Received Complex Treatment. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1000-1006.
- [26] Medvedev IN. (2019) Functional Readiness Of Platelets In Young People Who Regularly Visited The Section Of Unarmed Combat In Their Youth. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1381-1385.
- [27] Medvedev IN. (2019) Functional Activity Of Platelet Hemostasis Of Amateur Soccer Players Aged 26-35, Who Regularly Trained In Adolescence. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1426-1430.
- [28] Medvedev IN. (2019) Physical Features Of Platelet Activity During Low Physical Activity. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1468-1473.
- [29] Medvedev IN. (2019) Physiological Response Of Intravascular Platelet Activity In Adolescents With High Normal Blood Pressure To Regular Exercise. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1516-1520.
- [30] Medvedev IN. (2019) Platelet Functionality Of Candidates And Masters Of Sports In Athletics Of Youth And First Adulthood. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 10(1) : 1543-1548.
- [31] OshurkovaJuL, Medvedev IN. (2018) Physiological Indicators Of Platelets In Ayrshire Calves During The Dairy Feeding Phase. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6) : 171-176.
- [32] Vorobyeva NV, Medvedev IN. (2018) Physiological Features Of Platelet Functioning In Calves Of Holstein Breed During The Newborn. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6) : 129-135.
- [33] ZavalishinaSYu. (2018) Functional Features Of Hemostasis In Calves Of Dairy And Vegetable Nutrition. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6) : 1544-1550.



- [34] ZavalishinaSYu. (2018) Functional Activity Of Primary Hemostasis In Calves During The First Year OfLife. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 9(6): 1575-1581.
- [35] Vorobyeva NV, Mal GS, ZavalishinaSYu, Glagoleva TI, Fayzullina II.(2018)Influence Of Physical Exercise On The Activity Of Brain Processes. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 9(6): 240-244.
- [36] Mal GS, Vorobyeva NV, ZavalishinaSYu. (2019) The Biological Value Of The Motor Activity Of A Living Organism. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 332-340.
- [37] Gribovskaya IA, Mal GS, Tatarenkova IA, Belogurova AI, Smahtin EM, ZavalishinaSYu.(2019)Effect Of Genetic Polymorphism Of Cytokine Genes On The Drug Response OfStatins In Conditions Of Respiratory Infections. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1177-1183.
- [38] ZavalishinaSYu. (2019) Functional Features OfHemocoagulation In Newborn Calves UndergoingAcute Hypoxia On The Background Of Corrective Action. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1596-1601.
- [39] ZavalishinaSYu. (2019) Physiological Features Of Vascular Hemostasis In Cows Beginning To Lactate. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 10(1) : 1618-1623.