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DEVELOPMENT OF MICROCYCLES AND THEIR IMPLEMENTATION IN THE TRAINING PROCESS OF 13-14 YEARS OLD SOCCER PLAYERS AT THE SPECIAL PREPARATORY STAGE OF PRE-SEASON

S.V. Aver'yanov, V.A. Blinov

Federal State Budgetary Educational Institute of Higher Education "Siberian State University of Physical Culture and Sports", Omsk, Russia

Key words: young soccer players, special preparatory stage, competitive activity, microcycle.

Annotation. The article presents the structure of training microcycles used to prepare young soccer players for competitive activity at the special preparatory stage of pre-season. When developing these microcycles, the following points were taken into account: sensitive periods in the development of the physical qualities of children, the peculiarities of the special preparatory stage of the annual periodization of training, as well as the basic level of physical fitness of young soccer players. The orientation of microcycles remained unchanged for six weeks, only the operating mode varied, it was chosen based on the current functional state of the team and had a developing or supporting character.

Introduction. During the last decade, modern soccer has been rapidly developing, new approaches of training players appear, which include constant improvement of physical qualities of soccer players [4]. Therefore, requirements to the level of physical fitness of soccer players, to the development of all physical qualities of an athlete, have increased. During the game, soccer players perform extremely high loads, which require a sufficient level of the development of functional capabilities and training of volitional powers. Physical fitness is paramount in modern soccer. Russian soccer players became more competitive as a result of the fact that experts have recognized, that only on the condition of achieving high physical fitness, the high level of physical mastery and modern tactics can be maximally effective [6].

Training of young soccer players should be based on a well-balanced and successive training method, which contributes to the effective growth of sports mastery, intensive development of functional capabilities and their proper implementation. This, in turn, requires coaches to have an ability to choose and implement the most effective means of development of physical qualities of young soccer players in the training process. It is necessary to use various methods and

means of physical training at initial stages of long-term training, because it will allow for a more harmonious organization of the training process for young soccer players.

The purpose of this study was to develop microcycles for their implementation at the special preparatory stage of pre-season in order to develop physical qualities of 13-14 years old soccer players, taking their qualification level and fitness into account.

Methods and organization. The study was carried out from September 2018 to May 2020 on the base of the Department of Soccer and Hockey's Theory and Methodology of the SibSUPC and the Regional Center of Training Soccer Players "Irtysk" located in Omsk. Twenty-four young soccer players aged 13-14 years participated in the study, they were divided into two groups – the control (CG) and experimental (EG) groups. When conducting this study, following methods were applied:

1. Theoretical analysis of scientific and methodological literature;
2. Pedagogical observation;
3. Pedagogical testing;
4. Pedagogical experiment;
5. Mathematical statistics method.

At the first stage (September 2018 – January 2019), the analysis of scientific and methodological literature on the study's issue, contents of training microcycles were developed, program of evaluation of young soccer players' physical qualities was made.

At the second stage (February 2019 – November 2019), a pedagogical observation of the training process and competitive activities of young soccer players was conducted in order to examine dynamics of physical fitness parameters. Next, seven-day training microcycles were developed.

At the third stage (December 2019 – March 2020), pedagogical experiment was conducted, in which young soccer players aged 13-14 years participated in the study. At the beginning and end of the pedagogical experiment, testing for evaluation of motor abilities of young soccer players was conducted. Within six microcycles, young soccer players of the experimental group were training, according to the developed program, soccer players of the control group – program, developed for sports schools.

At the fourth stage (March 2020 – May 2020) a repeated testing of subjects from the experimental and control groups, the evaluation of effectiveness of developed microcycles, data processing with the use of mathematical statistics method were conducted, conclusions and practical guidelines were formed.

Results and discussion. Training microcycle included five days: five training classes, one day-off and one day, for which test game was planned (Table 1).

Table 1

Seven-day microcycle, used in training soccer players aged 13-14 years at the special preparatory stage

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-----------------------------|--------------------------|--------------------------|-------------------|-----------------------------|----------|-----------|
| Tact. and tech. orientation | Tech. and tact. training | Tech. and tact. training | Special endurance | General endurance | Day-off | Test game |
| | Speed | Speed-power training | | Tact. and tech. orientation | | |

When developing this microcycle, sensitive periods in the development of physical qualities of children, features of the special preparatory stage of the annual periodization of training, as well as the basic level of physical fitness of young soccer players were taken into account.

During the training process, emphasis was made on the most specific physical qualities of soccer players, the increase in the level of technical mastery and the formation of group and team interactions.

The structure of microcycles remained unchanged for six weeks, but the operating mode was chosen based on the current functional state of team members.

On the microcycle's first day, a training session was dedicated to tactical and technical training. Cases of the previous game were examined. Exercises, allowing to correct mistakes made during the previous game, were applied. The amount of physical loads was small in this session.

Second day of the microcycle was aimed at the technical and tactical training. In this session, emphasis was made on the increase of technical mastery of soccer players and using it in game exercises. Speed development served as the accompanying task of this training session.

The task of the third training day was to reserve the game's technique and learn group interactions. A task of speed-power training was solved in parallel. In order to solve set tasks, special game exercises from the first training day of the microcycle were used, but in more complicated conditions.

Peak loads occurred on the fourth day of the microcycle. The main task of this training session was the development of special endurance using specific means.

On the fifth training day, attention was focused on maintaining the general endurance level of young soccer players. On this day, attention was also given to group and team interactions, combinations were trained before the forthcoming test game. The training was conducted only in aerobic mode.

The day-off before the test game was used to improve the emotional background of soccer players, as well as to implement recovery processes. As a home task, recommendations for developing flexibility were given to young soccer players.

On the one hand, the test game served as an indicator of the level of team's fitness to competitive activities, on the other hand, it possessed loading character. During the game, loads were distributed equally among between all soccer players. Mistakes, which were made during the game, were registered, and game exercises were constructed on their basis, which were used in following microcycles.

Table 2

Results shown in test exercises by young soccer players of the EG and CG at the beginning of the experiment

| № | Test exercise | EG | CG |
|----|--|--------------|--------------|
| 1. | 1000-meter running | 3,43 ± 0,02 | 3,45 ± 0,03 |
| 2. | 4x9 meters shuttle run (s) | 9,06 ± 0,04 | 9,06 ± 0,04 |
| 3. | 7x50 meters shuttle run (s) | 68,09 ± 0,43 | 68,38 ± 0,48 |
| 4. | 30-meter running with acceleration (s) | 4,78 ± 0,04 | 4,81 ± 0,03 |
| 5. | 30-meter running without acceleration (s) | 3,96 ± 0,05 | 3,96 ± 0,04 |
| 6. | Standing long jump (cm) | 206 ± 3,75 | 201 ± 2,08 |
| 7. | Standing triple jump (cm) | 652 ± 12,3 | 641 ± 13 |
| 8. | Throwing a 2-kg ball from a sitting position (m) | 5,1 ± 0,22 | 4,7 ± 0,24 |

At the end of the experiment, a repeated testing was conducted (Table 3). As it was shown in Table 3, the highest growth rates of all indicators were revealed in young soccer players of the EG.

In the “100-meter running” exercises, showing general endurance, significant changes in both groups were registered in comparison with results shown before the experiment: EG – 6,01% ($P < 0,05$), CG – 3,7% ($P < 0,05$).

Table 3

Results shown in test exercises by young soccer players of the EG and CG after the experiment

| № | Test exercise | EG | | CG | |
|----|--|--------------|------------|--------------|------------|
| | | BEFORE | AFTER | BEFORE | AFTER |
| 1. | 1000-meter running | 3,43 ± 0,02 | 3,23±0,01 | 3,45 ± 0,03 | 3,32±0,02 |
| 2. | 4x9 meters shuttle run (s) | 9,06 ± 0,04 | 8,11±0,04 | 9,06 ± 0,04 | 8,67±0,05 |
| 3. | 7x50 meters shuttle run (s) | 68,09 ± 0,43 | 65,38±0,11 | 68,38 ± 0,48 | 67,43±0,42 |
| 4. | 30-meter running with acceleration (s) | 4,78 ± 0,04 | 4,58±0,03 | 4,81 ± 0,03 | 4,71±0,03 |
| 5. | 30-meter running without acceleration (s) | 3,96 ± 0,05 | 3,64±0,03 | 3,96 ± 0,04 | 3,83±0,03 |
| 6. | Standing long jump (cm) | 206 ± 3,75 | 221±2,42 | 201 ± 2,08 | 209±2,92 |
| 7. | Standing triple jump (cm) | 652 ± 12,3 | 699±6,25 | 641 ± 13 | 659±11,1 |
| 8. | Throwing a 2-kg ball from a sitting position (m) | 5,1 ± 0,22 | 5,9±0,18 | 4,7 ± 0,24 | 5,2±0,23 |

In the 4x9 meters shuttle run, showing special endurance, statistically significant growth rates were revealed in young soccer players of the EG – 4,06% ($P < 0,05$). Growth rate in young soccer players of the CG were 1,39% ($P > 0,05$).

Analysis of results of the 4x9 meters shuttle run, demonstrating coordination abilities, revealed significant growth rates – 11,06% (P<0,05) in young soccer players of the EG in comparison with the CG – 4,41% (P<0,05).

In young soccer players of both groups, growth rates in the 30-meter running with acceleration were revealed: the EG – 4,27% (P<0,05), the CG – 2,12% (P>0,05).

Despite the fact that the speed component is difficult to train, a significant growth rate of results in the 30-meter running without acceleration was revealed in the EG. Growth rate in young athletes of the EG, which was 8,02% (P<0,05), was statistically higher than in the CG – 8,02% (P<0,05).

Analysis of results of jump-based exercises showed that in young soccer players of the EG almost equal growth rates in the standing long jump – 7,23% (P<0,05) and in the standing triple jump – 7,03% (P<0,05). In young soccer players of the CG insignificant growth rates in the standing long jump by 4,15% (P>0,05) and in the standing triple jump by 2,82% (P>0,05) were revealed.

The highest growth rates were revealed in young soccer players of the EG – 15,53% (P<0,05) and CG – 9,22 % (P<0,05) in the test exercise “throwing a 2-kg ball from a sitting position”, in comparison with other tests.

Table 4
Growth rates of indicators in the EG and CG according to results of the experiment, %

| № | Test exercise | % of growth rates | |
|----|--|-------------------|------|
| | | EG | CG |
| 1. | 1000-meter running | 6,01 | 3,70 |
| 2. | 4x9 meters shuttle run (s) | 11,06 | 4,41 |
| 3. | 7x50 meters shuttle run (s) | 4,06 | 1,39 |
| 4. | 30-meter running with acceleration (s) | 4,27 | 2,12 |
| 5. | 30-meter running without acceleration (s) | 8,02 | 3,23 |
| 6. | Standing long jump (cm) | 7,23 | 4,15 |
| 7. | Standing triple jump (cm) | 7,03 | 2,82 |
| 8. | Throwing a 2-kg ball from a sitting position (m) | 15,53 | 9,22 |

Conclusion. Comparing standards for this age and the stage of long-term training with results of the initial testing showed that the physical fitness level of young soccer players corresponded to average.

Analysis of results of the pedagogical experiment allowed revealing positive influence of the developed program of microcycles on young soccer players, which was confirmed by growth rates of indicators of motor abilities in the EG, in comparison with the CG. In young soccer players of the EG growth tempo in test exercises was statistically significant. In young soccer players of the CG, growth rate was not statistically significant, with the exception of test exercises: 1000-meter running, 4x9 meter shuttle run, throwing a 2-kg ball from a sitting position.

The results obtained in these test exercises indicate a significant improvement of speed-power qualities of young soccer players, which shows an increased speed-power potential of students.

Results of conducted studies indicate the fact that the developed program of microcycles for young soccer players demonstrated high effectiveness.

References

1. Godik M.A. Physical training of soccer players: a monograph / M.A. Godik // M.: Terra-Sport, Olimpiya Press. – 2006. – 272 p.

2. Golomazov S.V. Soccer. Method of increasing local muscular performance of young soccer players during short-term training camps: guidance paper for coaches / S.V. Golomazov, B.G. Chirva, A. Denisenkov // M.: TVT Divizion. – 2013. – 40 p.

3. Guba V.P. Soccer: program for soccer academies, sports schools, Olympic Reserve schools and Olympic Reserve colleges / V.P. Guba, A.V. Antipov, V.A. Blinov et al. // M.: Publishing house “Sport”, Human. – 2015. – 208 p.

4. Kazakov V.N. Modern soccer: trends of development, methods of sports training, management and marketing: article collection / V.N. Kazakov // M.: “Scientific Adviser” Publishing House. – 2017 – 138 p.

5. Platonov V.N. Motor qualities and physical training of athletes / V.N. Platonov // M.: Publishing house «Sport». – 2019. – 656 p.

6. Seluyanov V.N. Physical training of athletes: guidance manual / V.N. Seluyanov, S.K. Sarsaniya, K.S. Sarsaniya. // M.: TVT Divizion. – 2006. – 192 p.

7. Shamardin A.A. Comprehensive functional training of young soccer players: a monograph / A.A. Shamardin // Saratov: “Scientific book”. – 2008. – 239 p.

Spisok literatury

1. Godik M.A. Fizicheskaya podgotovka futbolistov: monografiya / M.A. Godik // M.: Terra-Sport, Olimpiya Press. – 2006. – 272 s.

2. Golomazov S.V. Futbol. Metodika povysheniya lokal'noj myshechnoj rabotosposobnosti yunyx futbolistov v period kratkosrochnykh uchebno-trenirovochnykh sborov: metodicheskie razrabotki dlya trenerov / S.V. Golomazov, B.G. Chirva, A. Denisenkov. // M.: TVT Divizion. – 2013. – 40 s.

3. Guba V.P. Futbol: programma dlya futbol'nykh akademij, detsko-yunosheskikh sportivnykh shkol, spetsializirovannykh detsko-yunosheskikh shkol olimpijskogo rezerva i uchilishch olimpijskogo rezerva / V.P. Guba, A.V. Antipov, V.A. Blinov [i dr.] // M.: Izdatel'stvo «Sport», Chelovek. – 2015. – 208 s.

4. Kazakov V.N. Sovremennyj futbol: tendentsii razvitiya, metodiki sportivnykh trenirovok, menedzhment i marketing: sbornik statej / V.N. Kazakov // M.: Izdatel'stvo nauchnyj konsul'tant. – 2017 – 138 s.

5. Platonov V.N. Dvigatel'nye kachestva i fizicheskaya podgotovka sportsmenov / V.N. Platonov // M.: Izdatel'stvo «Sport». – 2019. – 656 s.

6. Seluyanov V.N. Fizicheskaya podgotovka futbolistov: metodich. posobie / V.N. Seluyanov, S.K. Sarsaniya, K.S. Sarsaniya. // M.: TVT Divizion. – 2006. – 192 s.

7. Shamardin, A.A. Kompleksnaya funktsional'naya podgotovka yunyx futbolistov: monografiya / A.A. Shamardin // Saratov: «Nauchnaya Kniga». – 2008. – 239 s.

Information about the authors: Sergej Viktorovich Aver'yanov – Lecturer of the Siberian State University of Physical Culture and Sports, Omsk; **Vyacheslav Anatol'evich Blinov** – Candidate of Pedagogical Sciences, Head of the Department of Soccer's Theory and Methodology of the Siberian State University of Physical Culture and Sports, Omsk.