Differentiation of the training load of football players of the training group at the stage of sports improvement

Said-Magomed Murvanovich Dzhulagov (0000-0003-1832-1091)¹⁽¹⁾, Askhab Ozderbievich Akhmedov (0000-0001-6670-069X)², Aslambek Abdul-Kerymovich Umarov (0000-0002-7358-5981)², Sher Khakimovich Khankeldiev(0000-0002-4395-9735)³, Golibjon Nematovich Ernazarov⁴

¹ FSBEI HE "Chechen State Pedagogical University", Department of Pedagogy, Grozny, Russian Federation

² FSBEI HE "Chechen State Pedagogical University", Physical culture and sports, Grozny, Russian Federation

³ Fergana Institute of Physical Education, Department of Theory and Methods of Physical Education, Fergana, Uzbekistan

⁴ Fergana Institute of Physical Education, Department of Physical Education, Theory and Methods of Sports, Fergana, Uzbekistan

Abstract. Differentiation of the training load of football players of the training group at the stage of sports improvement through the integration of special tactical training into the training process. Research objectives: to study the scientific and methodological literature on this topic, develop an experimental additional general educational developmental program "Football", experimentally test this program in practice and test its effectiveness. The following research methods were used in the study: analysis of scientific and methodological literature, testing, methods of mathematical statistics. It is assumed that the differentiation of the training process will improve the efficiency of the training process and game results. The research program was carried out in three stages. The purpose of the first stage was to substantiate and develop an experimental training program for football players. The second stage involved a comparative pedagogical experiment. At the third stage, tests were carried out, static processing of the obtained data, their interpretation and presentation, as well as analysis of the research results were performed.

Keywords: football, physical education, training, tactics, preparation, sport, stage.

1. Introduction

The relevance of research. The technique of training players in tactical skills is becoming more advanced every year, and game ideas are more modern. The arithmetic formulas of the schematic arrangement of the players are conditional. But something else is far from conditional: having possession of the ball, it is necessary to organize an attack, losing the ball - to organize defense. How

¹ Corresponding author: sema.dzhulagov@mail.ru

many players should be on defense? As much as possible, taking into account the specific situation. How many players should be in attack? As much as possible given the situation. These seemingly simple formulas contain a broad perspective for the creative work of coaches, which is aimed at solving an extremely complex task - to achieve deliberate synchronous actions of football players depending on different game situations. Coaches and players need to know for sure that thought is the main driving force of modern football. It is she who leads to the action of both individual players and entire teams. The tactical education of players is the basis for the further development of football, the key to future, more advanced systems for building a team game. [1,2].

Tactical training, together with technical training, can be called the basis of sports training, during which players learn technical and tactical subtleties that deepen their knowledge and abilities. [3].

The significance of tactics as one of the main means of wrestling is proved by the fact that, other things being equal, the team that is tactically more competent wins. In addition, due to the use of various modern tactical options, it is possible to defeat a team whose players are "head and shoulders above" in technical or physical terms. [5,6].

Accordingly, tactical training becomes very important at the stage of sports improvement, since this stage of football education is characterized by an increase in the tasks of the training process and a focus on achieving maximum sports results. [7]

A high level of tactical, psychological and physical readiness is required from a football player, which ensures the appropriate development of playing qualities. Competitive and game practice is increasing, and its influence on the planning and content of the training process is increasing. [8,9]

This stage maximizes tactical opportunities, and the emphasis of training is focused on expanding the tactical potential of the players and the team.

2. Materials and Method

The purpose of the study: differentiation of the training load of football players of the training group at the stage of sports improvement through the integration of special tactical training into the training process.

Research objectives:

- 1. Study the scientific and methodological literature on this topic;
- 2. Develop an experimental additional general educational development program "Football";

3. Experimentally test the experimental additional general educational developmental program "Football" and check its effectiveness;

Research methods:

- 1. Analysis of scientific and methodological literature;
- 2. Testing;
- 3. Methods of mathematical statistics.

2.1. *Subsection. Hypothesis.* Hypothesis. It is assumed that the integration into the training process of the load aimed at special tactical training as a separate section of the training process of football players will increase the efficiency of training football players and improve the game performance of football players.

The research work was carried out on the basis of the football section of the student sports club of the Chechen State Pedagogical University (hereinafter referred to as the University). The entire research program was carried out in three stages.

The main goal of the first stage of research was to substantiate and develop an experimental training program for football players.

The second stage involved a comparative pedagogical experiment. To solve the tasks set, two groups of University students aged 16-18 years old, involved in the football section of the University, were studied. The control and experimental groups were formed from first-year and college students of the University with basic football training. An entrance test was carried out.

The control group went in for football according to the program, which is used in this sports club to build sectional football lessons, developed on the basis of the program prepared by the team of authors consisting of: A.Yu. Sharakhudinova, N.S. Sudarchikova, E.A. Smirnova, S.A. Ivanov, developed taking into account the federal standard for sports training in the sport of football (approved by order of the Ministry of Sports of the Russian Federation of October 25, 2019 No. 880) [10].

The experimental group studied according to the experimental additional general educational developmental program developed by us, in which the section of special tactical training was integrated, with the corresponding change of hours, aimed at increasing the volume of specialized training of football players.

N⁰		Basic program		Pilot Program			
		Number of hours		Number of hours			
		Total	Theor y	Practice	Total	Theor y	Practice
1	Theoretical information	4	4		4	4	
2	OFP	18	4	14	16	2	14
3	Special training	18	2	16	14	2	12
4	Technical training	36	2	34	32	2	30
5	tactical training	20	2	18	16	2	14
6	Game preparation	32	2	30	28	2	26
7	Competition	16		16	16		16
8	Special tactical training				18	2	16
	Total:	144	16	128	144	16	128

Table 1 Approximate hourly plan for the training process of the basic and experimental programs.

Source: «Compiled by the authors».

The third stage involved conducting control testing, performing static processing of the obtained data of the pedagogical experiment, their interpretation and presentation of the research results.

3. Results

At the beginning and end of the experiment, tests were carried out on the level of development of physical, technical and tactical abilities of the control and experimental groups, as well as a comparative analysis of the statistical indicators of the game. Taking into account the age (16-18 years) and preparedness of the subjects, we selected such test exercises that could best judge the level of development of physical, technical and tactical abilities of a given age.

Testing and statistical indicators used to analyze the influence of the author's methodology on the performance of the experimental group:

- 1) 3000m run (min.);
- 2) Shuttle run 3 * 10 (sec.);

- 3) Juggling the ball (number of times per minute);
- 4) Difference of goals scored/conceded;
- 5) Possession of the ball (average percentage of performance in the last 10 matches);
- 6) Percentage of victories in test matches (10 matches).

Table 2 Entrance testing of indicators of physical, technical and tactical readiness of football players of two

	gro	oups.			
Sections of sports training Types of tests		Indicators of technical-tactical and physical fitness			
		KG	EG	Difference of indicators	
General physical preparation	3000m run (min.), (average)	13.24	13.26	P < 0.02	
Special physical training	Shuttle run 3 * 10 (sec.), (average)	9,6	9,7	P < 0.1	
Technical training	Ball juggling (number of times per minute), (average)	34	35	P < 1	
Tactical training	Ball possession (average percentage in last 10 matches)	49%	45%	P > 4%	
Difference of scored/missed goals.		+12	+12	$\mathbf{P} = 0$	
Percentage of wins in control matches		50%	40%	P > 10%	

Source: «Compiled by the authors».

Table 3 Final testing of indicators of physical, technical and tactical readiness of football players in the control

Sections of sports training	Types of tests	Indicators of technical-tactical and physical fitness			
		KG At the beginning of the experiment	KG In the end experiment	Difference of indicators	
General physical preparation	3000m run (min.), (average)	13.24	13.23	P > 0.01	
Special physical training	Shuttle run 3 * 10 (sec.), (average)	9,6	9,5	P > 0.1	

Sections of sports training	Types of tests	Indicators of technical-tactical and physical fitness		
		KG At the beginning of the experiment	KG In the end experiment	Difference of indicators
Technical training	Ball juggling (number of times per minute), (average)	34	34	P = 0
Tactical training	Ball possession (average percentage in last 10 matches)	49%	50%	P < 1%
Difference of scored/missed goals.		+12	+13	P < +1
Percentage of wins in control matches		50%	50%	P = 0%

Source: «Compiled by the authors».

Table 4 Comparative testing of input and output indicators of the experimental group.

Sections of sports training	Types of tests		ndicators of technical-tactical and physical eadiness of the experimental group		
		EG At the beginning of the experiment	EG In the end experiment	Difference of indicators	
general physical preparation	3000m run (min.), (average)	13.26	13.28	P < 0.02	
Special physical training	Shuttle run 3 * 10 (sec.), (average)	9,7	9,7	P = 0	
Technical training	Ball juggling (number of times per minute), (average)	35	35	P = 0	
Tactical training	Ball possession (average percentage in last 10 matches)	45%	58%	P < 13%	
Difference of scored	/missed goals.	+12	+18	P < +6	
Percentage of wins i		40%	70%	P < 30%	

Source: «Compiled by the authors».

Comparing the success of the development of one or another indicator according to the results of the experiment, we came to the following conclusions:

1. The level of indicators of general physical fitness according to the test "Running for 3000 meters" in the experimental group worsened by 2 seconds, in the control group it improved by 1 second.

2. The level of indicators of special physical training according to the indicators of the test "Shuttle run 3 * 10" in the experimental group remained at the same level, in the control group it improved by 0.1 second.

3. The level of indicators of technical training in terms of the test "Juggling the ball" in both the experimental and control groups remained at the same level.

4. The level of tactical training indicators in terms of game statistics on ball possession in the experimental group, the percentage of possession increased by 13 points, in the control group it increased only by 1%.

As for the main indicators reflecting the overall effectiveness of the entire training process, the results were as follows:

1. The goal difference score of the experimental group improved by 6 points, of the control group by 1 point.

2. The percentage of wins in control matches (over a period of 10 matches) in the experimental group improved by 30% (7 wins, 2 draws, 1 loss), in the control group the indicator remained at the same level of 50% (5 wins, 4 losses, 1 draw at the beginning of the experiment and 5 wins, 3 losses, 2 draws at the end)

These indicators demonstrate a positive impact on the training process of adding a section of special tactical training to the work program in order to increase the volume of hours aimed at specialized training of football players.

4. Discussion

The issues of preparing a sports reserve in football are actively considered by domestic and foreign experts. Some researchers (I.A. Arbuzin, O.B. Lapshin) argue that in order to achieve high sportsmanship in football, the key task is to find talented athletes and their subsequent targeted training for 8–10 years [11,12].

Other scientists (A.A.Suchilin, B.Ya. Tsirik) suggest focusing on the use of innovative approaches at different stages of training, which contribute to an increase in the level of physical and technical-tactical fitness. [13,14]

For example, in the study of Antipov A.V. It was assumed that the effectiveness of the system of long-term training of the sports reserve in football will increase significantly if the training process is carried out:

- in accordance with the rationalization of the system for planning training and competitive loads in the microcycles of football players of different age categories;

- depending on the specifics of building training sessions and assessing the comprehensive preparedness of athletes of various age categories in the annual training cycle. [fifteen]

Our study was aimed at studying these issues by analyzing the impact of special tactical training on the training process of football players, as a means of ensuring the effective formation of a player's sportsmanship and a way to increase the level of his technical and tactical preparedness.

The results of the study showed that the emphasis on special tactical training at the stage of sports improvement has a positive effect on the game performance of both players and teams, and partly confirms the theories of A.A. Suchilin and B.Ya. The cyric that the emphasis on the application of innovative approaches at different stages of training that contribute to an increase in the level of physical and technical-tactical readiness, as well as the hypothesis of A.V. Antipov that with the rationalization of the planning system for training and competitive loads in the microcycles of football players of different age categories, the game performance and the level of skill of football players will improve.

5. Conclusion

The experimental study helped to reveal that the integration into the training process of special tactical training of football players as a separate section has a positive effect on the results of the team.

For example, a 13 percent increase in possession percentage reflects improved team control.

The positive effect of integrating special tactical training into the training process is also justified by a significant improvement in the rate of goals scored and conceded in games (plus 6 goals), which directly affects the increase in team victories in games.

The negative correction of other indicators is insignificant (Table 5) and does not lead to a deterioration in significant indicators, which demonstrates an increase in the number of matches won as the main indicator of the effectiveness of the training and preparatory process.

All this demonstrates that the group of football players trained according to the experimental program (experimental group) significantly improved their performance indicators based on the results of the experiment, and the deterioration in performance in general physical fitness turned out to be insignificant and does not have a negative impact on the playing capabilities of the players and the team as a whole.

Our study demonstrates the effectiveness of differentiating the training load of football players of the training group at the stage of sports improvement by integrating special tactical training into the training process and substantiates the possibility of considering both the method of integrating special tactical training into the training process and the data obtained as a result of the experiment as a means of improving additional general educational developing programs for sports schools and football clubs on an ongoing basis.

References

1. Methodological foundations of basic training of football coaches : textbook / A. A. Shamardin, A. A. Kondrashov, A. P. Komarov, V. K. Maksimik. — Volgograd : VGAFK, 2018. — 44 p. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/158199

2. Semenova, G. I. Sports orientation and selection for various sports : a textbook / G. I. Semenova ; under the scientific editorship of I. V. Yerkomaishvili. — 2nd ed., erased. — Moscow: FLINT, 2017. — 104 p. — ISBN 978-5-9765-3236-6. — Text : electronic // Lan : electronic library system. — URL: <u>https://e.lanbook.com/book/187845</u>

3. Levchenko, E. S. Football : a textbook / E. S. Levchenko. — Stavropol : NCFU, 2014. — 159 p. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/155515

4. Vaulina, E. Yu. Football : dictionary / E. Yu. Vaulina. — Saint Petersburg : A. I. Herzen State Pedagogical University, 2018. - 288 p. — ISBN 978-5-8064-2526-4. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/136728

5. Rules of the sport "Football of persons with CP disease" : Order of the Ministry of Sports of the Russian Federation No. 1095 dated December 27, 2018 / . — Saratov : University Education, 2022. — 56 p. — ISBN 978-5-4487-0853-4. — Text : electronic // IPR SMART : [website]. — URL: https://www.iprbookshop.ru/123610.html

6. Simonyan N.P. Football is not only a game! / Simonyan N.P. — Moscow : Man, 2022. — 384 p. — ISBN 978-5-906132-68-0. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/123409.html</u>

7. Ivanov O.N. Long-term training of the sports reserve in women's football : an educational and methodological manual / Ivanov O.N., Bystritsky Yu.V. — Moscow : Sport Publishing House, 2021. — 168 p. — ISBN 978-5-907225-72-5. — Text: electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/110428.html</u>

8. Andreev S.N. Mini-football (futsal). Exercises on physical and technical-tactical training : an educational and methodical manual / Andreev S.N. - Moscow : Sport Publishing House, 2020. — 472 p. — ISBN 978-5-9500179-5-7. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/94124.html</u>

9. Theory and methodology of football : textbook / V.P. Guba [et al.].. — Moscow: Sport Publishing House, 2018. — 624 p. — ISBN 978-5-9500179-8-8. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/74304.html</u>

10. Platonov V.N. Motor qualities and physical training of athletes / Platonov
V.N. — Moscow : Sport Publishing House, 2022. — 656 p. — ISBN 978-5-907225-93-0.
— Text : electronic // IPR SMART : [website]. — URL: https://www.iprbookshop.ru/119191.html

11. Physical culture and sport in modern professions : textbook / A.E. Burov [et al.].. — Saratov : University Education, 2022. — 261 p. — ISBN 978-5-4487-0807-7. — Text :

electronic // IPR SMART : [website]. — URL: https://www.iprbookshop.ru/116615.html

12. Golomazov S.V. Football. Technique, tactics and training of throwing the ball from behind the sideline : methodological developments for coaches / Golomazov S.V., Chirva B.G., — Moscow : TVT Division, 2013. — 35 p. — ISBN 978-5-98724-150-9. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/20749.html</u>

13. Sports training : educational and methodical manual / . — Eagle : Interregional Academy of Safety and Survival (MABIV), 2020. — 105 p. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/95429.html</u>

14. Kuznetsov, A. A. Football. The children's trainer's handbook. Stage 1 (8-10 years) / A. A. Kuznetsov. — Moscow : Sport-Man, 2007. — 112 p. — ISBN 978-5-903508-02-0. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/97578

15. Sholikh M. Circular training / Sholikh M. — Moscow : Sport Publishing House, 2021. — 216 p. — ISBN 978-5-907225-67-1. — Text : electronic // IPR SMART : [website]. — URL: <u>https://www.iprbookshop.ru/110427.html</u>