



MODERN METHODS FOR DEVELOPING SPEED AND ENDURANCE QUALITIES IN FOOTBALL PLAYERS

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Abstract

This article presents a scientific and methodological analysis of modern methods for developing speed and endurance qualities in football players. During the study, the effectiveness of high-intensity interval training, short-distance sprint exercises, and football-specific endurance drills aimed at simulating game conditions was examined in the process of improving football players' physical fitness. In the pedagogical experiment, football players were divided into experimental and control groups, and their speed and endurance indicators were comparatively analyzed. The research results demonstrated a more stable improvement in speed and endurance qualities in the experimental group compared to the control group. The obtained scientific findings substantiate the effectiveness of introducing modern training technologies into the football training process and highlight their significant practical value in improving the educational and training system.

Keywords: Football players, speed, endurance, speed-endurance, physical fitness, modern training methods, pedagogical experiment, sports pedagogy, training process.

Introduction

In the modern sports system, the development of football players' physical fitness-particularly speed and endurance qualities-represents one of the most pressing scientific and practical challenges. Today, the increasing intensity of football matches, higher game speed, and growing complexity of technical and tactical actions require football players to possess a high level of speed, speed-endurance, as well as general and special endurance. Therefore, the scientific application of modern training methods in the preparation of football players is of great importance.



The relevance of this study is also directly related to the regulatory and legal documents aimed at developing physical education and sports in the Republic of Uzbekistan. In particular, the Decree of the President of the Republic of Uzbekistan dated January 24, 2020, No. PF–5924 “On Measures to Further Improve the Physical Education and Sports Sector” emphasizes the task of scientifically improving athletes’ physical fitness. In addition, the Resolution dated April 11, 2022, No. PQ–201 “On Measures to Develop Mass Football and Improve the Professional Football System” identifies the introduction of modern methodological approaches in football training as a priority task [1].

Relevance of the Study

At present, football as a sport is developing rapidly, with significant increases in match tempo, movement speed, and functional loads placed on players. Modern football requires athletes with highly developed speed, speed-endurance, and both general and special endurance qualities. Consequently, improving football players’ physical fitness—especially the development of speed and endurance—remains a key scientific and practical issue in sports pedagogy and training theory.

Traditional training methods do not always fully meet the demands of modern football, which necessitates the implementation of contemporary, scientifically grounded approaches to the training process. The relevance of this research is also closely linked to the state policy of the Republic of Uzbekistan in the field of physical education and sports. The Decree of the President dated January 24, 2020, No. PF–5924 outlines tasks for the scientific improvement of athletes’ physical fitness, while the Resolution dated April 11, 2022, No. PQ–201 highlights the importance of introducing modern training technologies into football preparation. These regulatory documents further strengthen the necessity of conducting scientifically substantiated research on the development of speed and endurance qualities in football players [2].

Research Methodology

The research methodology was based on modern scientific concepts of sports pedagogy, physical education, and sports training theory. The principles of systematic approach, continuity, and gradual progression were adopted throughout

the study. To scientifically analyze the process of developing speed and endurance qualities in football players, the following methods were employed: pedagogical observation, pedagogical experiment, physical fitness assessment tests, measurement methods, and mathematical-statistical analysis.

During the pedagogical experiment, participants were divided into an experimental group and a control group. In the experimental group, training sessions were organized using modern high-intensity interval training, sprint exercises involving acceleration and deceleration, and endurance drills closely simulating game conditions. In the control group, traditional training methodologies were maintained. Throughout the study, football players' physical qualities were assessed through testing at the beginning and at the end of the training period, and the results were subjected to comparative analysis [3, p. 543].

Using mathematical-statistical analysis, the results of the experimental and control groups were compared based on percentage indicators, and the effectiveness of modern training methods was scientifically substantiated. This methodological approach ensured the reliability and practical significance of the research findings. The main objective of the study was to determine the effectiveness of modern training methods in developing speed and endurance qualities in football players and to develop scientific and methodological recommendations. The research involved football players aged 16–17, who were divided into experimental and control groups. In the experimental group, training sessions included modern high-intensity interval exercises, sprint drills with acceleration and deceleration, short-distance runs with and without the ball, and endurance exercises adapted to game conditions. In the control group, traditional training methods were preserved.

Table 1 Indicators of Improvement in Speed and Endurance Qualities of Football Players

No.	Physical Quality	Assessment Indicator	Experimental Group (%)	Control Group (%)
1	Speed	30 m sprint speed	3.3%	1.5%
2	Speed	Reaction and acceleration	3.2%	1.4%
3	Speed-endurance	Repeated sprint ability	3.4%	1.6%
4	General endurance	1000 m run performance	3.1%	1.7%
5	Special endurance	Work capacity during play	3.3%	1.5%



Discussion of Research Results

During the study, the effectiveness of modern training methods aimed at developing speed and endurance qualities in football players was scientifically analyzed. The obtained results showed that the high-intensity interval training, short-distance sprint exercises, and complex drills involving acceleration and deceleration applied in the experimental group had a positive impact on football players' physical qualities. In particular, stable improvements were observed in speed and speed-endurance indicators.

In the control group, where training sessions were conducted using traditional methods, the improvement of physical qualities was relatively lower. This confirms the significant role of modern training technologies in expanding football players' functional capabilities. The results indicate that aligning training sessions closely with game conditions, individualizing training loads, and gradually increasing exercise complexity contribute to maintaining endurance and improving the effectiveness of rapid movements.

The percentage improvements ranging from 3–4% indicate that the development of football players' physical qualities occurred in a scientifically regulated, health-safe, and stable manner. This reflects the correctness of training load planning and methodological organization.

Overall, the study demonstrated that the use of modern training technologies effectively contributed to the development of speed and endurance qualities in football players. In the experimental group, significant improvements were observed in short-distance sprint speed, the ability to repeatedly perform high-speed movements, and the capacity to maintain work performance during matches. High-intensity interval training, in particular, proved to be highly effective in developing speed-endurance.

By the end of the study, speed indicators in the experimental group increased by an average of 3.2–3.4%, while endurance indicators improved by 3.1–3.3%. In contrast, the control group demonstrated improvements of only 1.3–1.7%. These findings scientifically confirm that the selected modern training methods are more effective than traditional approaches.

The analysis of the obtained results indicates that, in developing speed and endurance qualities in football players, maximizing the similarity of training exercises to game conditions, individualizing training loads, and progressively



increasing exercise difficulty are essential pedagogical conditions. Modern training methods enhance not only physical but also functional capacities of football players, ensuring stability in competitive performance. Based on the research findings, it is recommended to plan and implement special exercises aimed at developing speed and endurance in the football training process.

In general, this study demonstrates the high effectiveness of modern methods for developing speed and endurance qualities in football players and supports the integration of these approaches into the educational and training process to improve sports performance.

Conclusion

Based on the research results, it can be concluded that the use of modern training methods in developing speed and endurance qualities in football players is highly effective. The experimental group demonstrated significantly greater improvements in physical qualities compared to the control group, which scientifically confirms the superiority of modern methodological approaches. The application of high-intensity interval training, speed-oriented sprint exercises, and special endurance drills contributes to enhancing football players' game performance.

The obtained results have important scientific and practical value for improving the football training process and for introducing modern training methods into the system of youth football development.

References

1. O'zbekiston Respublikasi Prezidentining 2020 yil 24 yanvardagi PF-5924-sonli Farmoni. Jismoniy tarbiya va sport sohasini yanada takomillashtirish chora-tadbirlari to'g'risida. – Toshkent, 2020.
2. O'zbekiston Respublikasi Prezidentining 2022 yil 11 apreldagi PQ-201-sonli Qarori. Futbolni ommaviy rivojlantirish va professional futbol tizimini takomillashtirish chora-tadbirlari to'g'risida. – Toshkent, 2022.
3. Матвеев Л.П. Теория и методика физической культуры. – М.: Физкультура и спорт, 2010. – 543 с.
4. Платонов В.Н. Система подготовки спортсменов в олимпийском спорте. – Киев: Олимпийская литература, 2015. – 680 с.



5. Верхошанский Ю.В. Основы специальной физической подготовки спортсменов. – М.: Советский спорт, 2006. – 331 с.
6. Годик М.А. Физическая подготовка футболистов. – М.: Терра-Спорт, 2009. – 272 с.
7. Ismatov A.A., Abdullayev R.X. Futbolchilarning jismoniy tayyorgarligini oshirish metodikasi. – Toshkent: O‘zDJTSU, 2018. – 156 b.