EFFECTIVENESS OF INTENSITY IN SPORTS TACTICS TRAINING OF SOCCER PLAYERS

EFICÁCIA DA INTENSIDADE NO TREINAMENTO DAS TÁTICAS ESPORTIVAS DOS JOGADORES DE FUTEBOL

EFICACIA DE LA INTENSIDAD EN EL ENTRENAMIENTO DE LAS TÁCTICAS DEPORTIVAS DE LOS FUTBOLISTAS

Original Article
Artigo Original
Artículo Original

Huailei Huang[1]
(Physical Education Professional)

1. Department of Physical Education, Jiangsu University, Zhenjiang, Jiangsu, 212013, China.

Correspondence:
Huailei Huang
Jiangsu, China. 212013.
huanghl@ujs.edu.cn

ABSTRACT

Introduction: Soccer is the most popular, widely developed and influential competitive sport worldwide, and is known as "the world's first sport". Objective: To study the effectiveness of tactical training intensity in competitive sports of soccer players. Methods: 31 male athletes from the district high school soccer training team were trained 5 times a week. Among them, technical and tactical training: The combination of technical soccer practice and competition on small fields, the duration of training was 50-60 minutes. Results: After 10 weeks of high intensity interval training, the control group and the experimental group were $0.01<p<0.05$ before the experiment. There was a significant difference in the technical assessment scores between the two groups. After 10 weeks of high-intensity interval training, the fitness of the experimental group, such as fast running, endurance running, and explosive power, was significantly optimized. Conclusion: As an auxiliary training method, tactical training is more targeted than traditional training methods and more in line with soccer characteristics. ***Level of evidence II; Therapeutic studies - investigation of treatment outcomes.***

Keywords: Physical Education and Training; Sports; Soccer.

RESUMO

Introdução: O futebol é a mais popular, amplamente desenvolvida e influente competição esportiva mundial, e é conhecida como "o primeiro esporte do mundo". Objetivo: Estudar a eficácia da intensidade do treinamento tático nos esportes competitivos dos jogadores de futebol. Métodos: 31 atletas masculinos da equipe distrital de treinamento de futebol do ensino médio foram treinados 5 vezes por semana. Entre eles, o treinamento técnico e tático: A combinação de prática técnica de futebol e competição em pequenos campos, a duração do treinamento foi de 50-60 minutos. Resultados: Após 10 semanas de treinamento em intervalos de alta intensidade, o grupo de controle e o grupo experimental foram $0.01<p<0.05$ antes do experimento. Havia uma diferença significativa nas pontuações da avaliação técnica entre os dois grupos. Após 10 semanas de treinamento em intervalos de alta intensidade, a aptidão física do grupo experimental, como corrida rápida, corrida de resistência e potência explosiva, foram significativamente otimizadas. Conclusão: Como método auxiliar de treinamento, o treinamento tático é mais direcionado do que os métodos tradicionais de treinamento e mais alinhado com as características do futebol. ***Nível de evidência II; Estudos terapêuticos - investigação dos resultados do tratamento.***

Descritores: *Educação Física e Treinamento; Esportes; Futebol.*

RESUMEN

Introducción: El fútbol es el deporte de competición más popular, desarrollado e influyente del mundo, y se lo conoce como "el primer deporte del mundo". Objetivo: Estudiar la eficacia de la intensidad del entrenamiento táctico en los deportes de competición de los jugadores de fútbol. Métodos: 31 atletas masculinos del equipo de entrenamiento de fútbol de la escuela secundaria del distrito fueron entrenados 5 veces por semana. Entre ellos, el entrenamiento técnico y táctico: La combinación de la práctica del fútbol técnico y la competición en campos pequeños, la duración del entrenamiento era de 50-60 minutos. Resultados: Después de 10 semanas de entrenamiento de intervalos de alta intensidad, el grupo de control y el grupo experimental eran $0,01<p<0,05$ antes del experimento. Hubo una diferencia significativa en las puntuaciones de la evaluación técnica entre los dos grupos. Después de 10 semanas de entrenamiento de intervalos de alta intensidad, la aptitud del grupo experimental, como la carrera rápida, la carrera de resistencia y la potencia explosiva, se optimizaron significativamente. Conclusión: Como método de entrenamiento auxiliar, el entrenamiento táctico es más específico que los métodos de entrenamiento tradicionales y se ajusta más a las características del fútbol. ***Nivel de evidencia II; Estudios terapéuticos - investigación de los resultados del tratamiento.***

Descriptores: *Educación y Entrenamiento Físico; Deportes; Fútbol.*

DOI: http://dx.doi.org/10.1590/1517-8692202329012022_0355 Article received on 06/07/2022 accepted on 07/15/2022

INTRODUCTION

As far as football is concerned, the demands and fast pace of modern football games require players to have the ability to accelerate, decelerate or be flexible enough. Speed is one of the keys to winning a game, and modern football is faster than ever before, specifically, whether it is the speed of the ball, or the speed of the player's own movement, compared with 10-15 years ago, it has greatly improved. Today's football game has undergone great changes quietly, players are running faster on the field, the passing of the ball at the player's feet is faster and more and more teams are opting to pass the ball during the game.[1] Therefore, controlling the rhythm of the game is a very important ability for the entire team and individual players. Success or failure will depend on subtle and fast foot technique and body movements, high-speed, high-precision completion of scoring, catching, guarding or dribbling breakthroughs. Players must have both technical and tactical qualities of precision and quick response. A football game is a process of fierce competition in time and space for the goal or restricting the opponent's goal through the passing and cooperation between the two sides through personal skills and peers. In essence, it is a contest of technology, tactics and physical fitness.[2] In recent years, football competitions have become more intense, and the transition between offense and defense has become faster, the development trend of modern football has higher and higher requirements for athletes' physical fitness. Continuously improve the scientific level of physical training, maximizing the potential of athletes is the common goal of domestic and foreign physical training. Currently, the football industry in our country has always been puzzled by the problem of physical fitness of athletes, the training level of physical fitness of football players is still low, many domestic coaches and managers have an understanding of football physical training, still staying at the level of experience, lack of understanding of football physical training. Therefore, Scientifically solve the problem of physical fitness training for football players, it is particularly important to correctly handle the relationship between physical training and technical and tactical training.[3]

Experimental subjects and methods

The subjects of the study were 31 athletes from two high school men's soccer training teams from 2017 to 2018, and 15 in the experimental group, with an average age of 16.2±0.86, an average height of 1.73±0.05, and an average weight of 63.2±3.4. The control group consisted of 16 people, with an average age of 16±0.89, an average height of 1.74±0.02, and an average weight of 63.8±3.8.

Experimental method

The training contents mainly include: dynamic stretching warm-up, agile coordination training, lateral movement training, direction--changing movement resistance training, energy supply capacity training, etc.(Table 1)

Table 1. Training content.

Project	Special content			
Special physical training	**Squat and jump**	**10-20kg Weighted Lunge Jump**	**Jumping steps**	**Fast run agility ladder**
	old man push cart	Chest press barbell 20kg	Crunch	jump rope fast
	spinning bike	50-70kg barbell squat	belly jump	UFC rope swing
	sit in a space chair	back squat	hurdles	run fast
	side plank	Supine Pedal	run behind people	resistance band sprint

A total of 10 weeks (4th week off). 5 workouts per week. Among them, technical and tactical training: Soccer technical practice combined with small field games, training time 50-60 minutes. The special physical training time is 25 minutes, focusing on strengthening the speed endurance of athletes and the explosive strength training of the legs.[4] A questionnaire was used to investigate the importance (very important, more important, generally important, less important, very unimportant) of various indicators of football players' competitive ability among football experts, scholars, coaches, and referees. The recovery rates of the two questionnaires were 96% and 92%, respectively, and the effective rates were 92% and 96%, respectively. The training contents mainly include: Dynamic stretching warm-up, agility coordination training, lateral movement training, resistance training for changing direction movement, and energy supply capacity training are shown in Table 1.

Data Analysis

SPSS 19.0 was used to manage and analyze the data, and the results were expressed in the form of mean ± standard deviation, the differences between groups were tested by independent samples t test, and the comparison and analysis of the data in each group before and after the experiment was performed by paired t test for statistical differences.[5]

Experimental results

Contents and evaluation methods of football special technical tests, it is mainly based on the football skills test and evaluation standards of the "China Soong Ching Ling Foundation Jaguar Land Rover China Youth Dream Fund Small Player Development Program": 6-meter distance pass (5 feet), 30-second ball control (within 2×2 meters), dribbling around the bar (5 shots, 1.5-meter distance), 30-second dribbling back and forth (within 3×3 meters). (Table 2)

It can be seen from Table 2 that the two groups before the experiment passed the data test comparison: There is no difference in special football qualities such as shooting around the pole with the ball, running around with the ball in 30 seconds, and running back and forth 5×25 meters,[6] which shows that: The football ability of the athletes in the experimental group and the control group was at the same level.

After 10 weeks of regular training and high-intensity interval training, in the control group and the experimental group, the two techniques of shooting around the pole with the ball and controlling the ball for 30 seconds, there is a very significant difference $p \leq 0.01$; 6-meter distance pass, 30 seconds with the ball back and forth running 2 techniques, there is a significant difference of $0.01<p<0.05$. (Table 3)

Table 3 shows that: The strengthening of high-intensity interval training can improve the endurance and explosive power of young people, and the improvement of special physical fitness can promote the stable performance of young people's football skills.[7] After 10 weeks of high-intensity repeated training, the athletes in the experimental group had significant improvements in individual skills such as dribbling, ball control, and passing accuracy, it lays a solid foundation for athletes

Table 2. The independent sample T test results between the index groups before the experiment.

	Shooting around the bar with the ball (seconds)	**30 seconds to run back and forth with the ball (times)**	**30 seconds of ball control (times)**	**6-meter spacing transmission (units)**
Control group N=16 people	11.35±0.58	15.43±1.36	21.75±7.25	1.14±0.714
Experimental group N=15 people	12.35±1.25	22.56±3.61	25.35±8.4	1.67±0.72
t	-3.56	3.43	3.02	2.043
P	0.00	0.04	0.01	0.048

to apply a single technique to multi-person confrontation practice or competition, and to improve students' practical application ability.[8]

As shown in Figure 1, before the experiment, the control group and the experimental group were p>0.05. There was no difference in the technical assessment scores between the two groups. After 10 weeks of high-intensity interval training, before the experiment, the control group and the experimental group were 0.01<p<0.05. There was a significant difference in the technical evaluation scores between the two groups.[9-10]

After 10 weeks of training in the experimental group and the control group, the youth football skills and tactics have been significantly improved, which shows that the school's traditional conventional football training methods and methods are also reasonable and effective, it is also suitable for promoting the improvement of the technical level of youth football. Football is an intermittent, repetitive, short-term high-intensity exercise interspersed with running, walking and standing at different speeds. High-intensity interval training strengthens the training of special qualities such as sprint running, acceleration, vertical take-off, explosive power, starting, acceleration in changing directions, and agility, in particular, key training is carried out for young people with weak leg muscle strength, insufficient explosive power, poor endurance, and slow starting and acceleration.[11] Therefore, as an auxiliary training method, high-intensity interval training is more targeted and more in line with the characteristics of football than traditional training methods. The effect of football technique and physical training, in the end, it will be tested by actual combat.

There is no need for a code of ethics for this type of study.

Table 3. Independent sample T-test results between each index group.

	Shooting around the bar with the ball (seconds)	30 seconds to run back and forth with the ball (times)	5 x 25 meters back run (seconds)
Control group N=16 people	12.26±0.35	15.7±1.36	32.28±2.45
Experimental group N=15 people	12.06±1.24	19.32±1.25	31.27±0.725
t	-1.524	1.00	-2.35
P	0.14	0.34	0.08

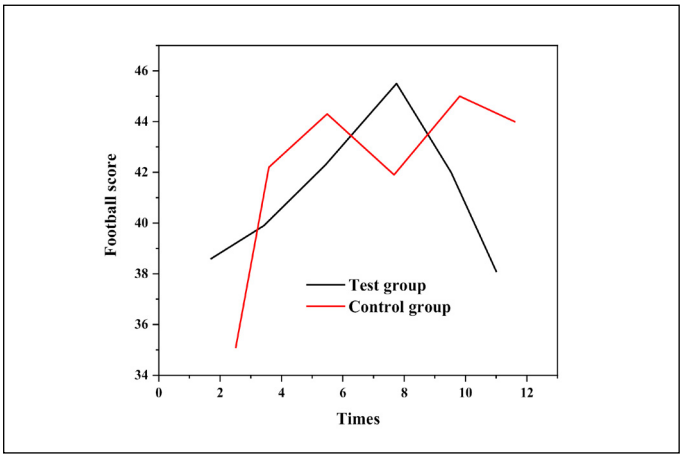

Figure 1. Football technical evaluation results.

CONCLUSION

In modern football, technology is the foundation, tactics are the means, and physical fitness is the guarantee for the completion of techniques and tactics. Only with good physical fitness can you play and show your technical and tactical level in the game. Having good physical fitness can also make up for many technical and tactical deficiencies. In football, technical and physical training are closely related, mutually reinforcing, and contradictory. These two aspects of training should be scientifically distributed and not neglected. Physical training should be aimed at developing players' football skills; Technical training should be based on physical training. Reasonably arrange the training proportion of the two, and effectively combine physical training with technical and tactical training, for high-level athletes, physical training should be used to promote the improvement of technical and tactical levels; For young athletes and novice athletes, technical and tactical methods should be used as the main means to develop physical training levels.

The author declare no potential conflict of interest related to this article

AUTHORS' CONTRIBUTIONS: Each author made significant individual contributions to this manuscript. Mengmeng Lei: writing; Shan Mi: data analysis, article review and intellectual concept of the article.

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