

CHANGES IN THE LEVEL OF MOTOR PREPARATION OF PROFESSIONAL SOCCER PLAYERS IN TRAINING

MATEUSZ KOZIEŁ, JAKUB GRZEGORZ ADAMCZYK

*Józef Piłsudski University of Physical Education in Warsaw, Faculty of Physical Education,
Chair of Sport, Warsaw, Poland*

Mailing address: Jakub Grzegorz Adamczyk, Józef Piłsudski University of Physical Education in Warsaw, Faculty of Physical Education, 34 Marymoncka Street, 00-968 Warszawa, tel.: +48 22 8347663, fax: +48 22 8651080, e-mail: jakub.adamczyk@awf.edu.pl

Abstract

Introduction. Since the competition period has been prolonged in modern football, it is important to know if a shortened preparatory phase is enough to improve motor fitness preparation. This study analysed the changes in the level of physical fitness in second-league soccer players with respect to training conducted during the preparatory period. **Material and methods.** Speed (5-m and 30-m sprint), endurance (progressive test), and power (Counter Movement Jump) were tested in 21 players at the beginning and at the end of the preparatory phase. **Results.** The results obtained indicate a significant improvement in physical capacity parameters as well as speed and strength abilities measured using 5-m and 30-m running speed tests and the CMJ test for muscle power. In the progressive test measuring anaerobic threshold speed, the players active in the central section of the pitch (centre-backs and central midfielders) achieved the best results, while in the speed trials and explosive strength trials, side-backs and side midfielders achieved the best results. **Conclusions.** During the winter preparatory season, the most significant changes in the physical fitness of soccer players were observed in aerobic endurance expressed as threshold speed (an increase of 1.2 km/h) and running speed measured as the time needed to cover a distance of 5 m (time reduced by 0.04 s) and 30 m (time reduced by 0.07 s). These traits are crucial in the preparation of soccer players for league matches and have the greatest impact on their performance in sports competitions.

Key words: football, physical fitness, preparatory phase, motor preparation