



Improving the motor activity of highly qualified football players in china taking into account the variation of the intensity of training at small venues

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Abstract

Objective of the study was to evaluate the effectiveness of the methodology for improving the motor activity of highly qualified female football players in China, taking into account the variation in the intensity of training at small venues.

Methods and structure of the study. The experiment was conducted in 2020-2022, in which the girls of the Chinese women's national football team and professional clubs participating in the games of the Chinese Women's Super League took part. The age of the participants was 20-25 years. The study included approbation of the effectiveness of the use of small areas to increase the motor activity of female football players during the game, which was assessed by the dynamics of indicators of quantitative and qualitative characteristics of the game actions of female athletes in the process of competitive activity.

Results and conclusions. The methodology for increasing the motor activity of highly qualified female football players in China, taking into account the variation in the intensity of training on small venues, includes many components, factors and various forms of improvement in real game conditions that determine the effectiveness of the development of aerobic and anaerobic endurance, speed abilities, as well as technical and tactical actions and interactions.

To increase the motor activity of highly qualified female football players in the process of competitive activity through the mechanism of increasing speed and endurance, it is necessary to pay special attention to the issues of aerobic and anaerobic performance. This approach is a solid basis for improving athletic performance and serves as an important basis for improving physical fitness.

Keywords: *football, highly qualified sportswomen, physical activity, small football grounds.*

Introduction. Motor activity in football is considered as the volume and intensity of movements (running, starting accelerations, braking) that an athlete performs during the entire game [2, 4]. The intensity of movements largely depends on the speed that the athlete demonstrates in the process of running, and accelerations throughout the match or training [1, 3]. In this regard, the undertaken study allows us to state its high scientific and practical significance for the modern theory and methodology of training highly qualified female athletes in football.

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characteristics of the game actions of female athletes in the process of competitive activity.

Results of the study and their discussion. In modern men's and women's football, one of the most informative indicators of players' motor activity is the distance covered by the team during the game and the number of accelerations performed. Before the start of the formative pedagogical experiment, there were no significant differences in the indicators of the game overcome during the game and the number of accelerations ($p > 0.05$) among the highly qualified female football players Kita from the CG and the EG, which indicates the homogeneity of the groups under consideration (Figure 1).

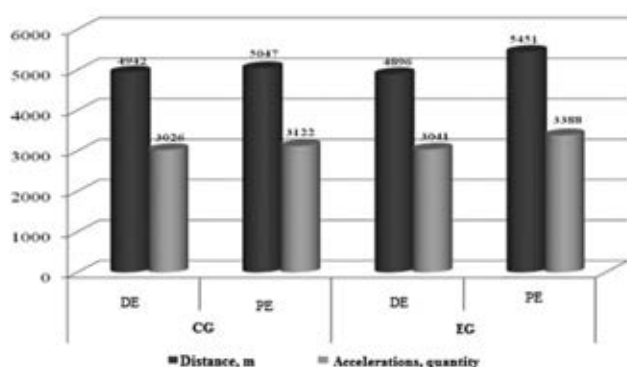


Figure 1. Dynamics of physical activity of highly qualified female football players in China

As a result of varying the intensity of training on small areas, highly qualified Chinese football players from the EG showed a significant increase in the indicators of the distance covered and the number of accelerations performed by 555.0 ± 4.6 m and 374.0 ± 3.8 times by the end of the formative pedagogical experiment compared to the players.

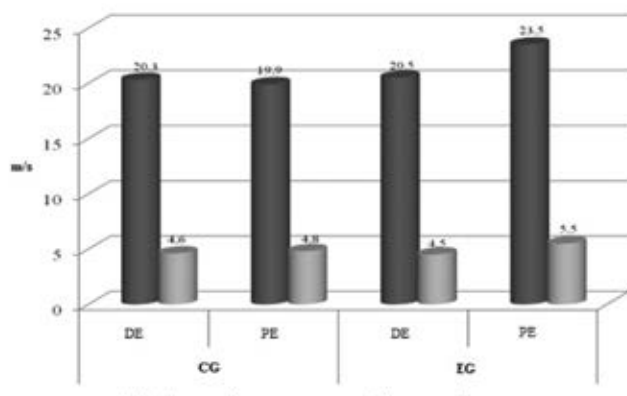


Figure 2. Dynamics of maximum and average speed indicators among highly qualified female football players in China

CG - 105.0 ± 1.7 m and 96.0 ± 0.8 times, respectively ($p < 0.05$).

Studies have shown that before the start of the formative pedagogical experiment, highly qualified female football players in China were homogeneous, since the indicators of maximum and average movement speed did not have significant differences ($p > 0.05$; Figure 2).

The use of game exercises on small areas allowed to significantly increase the maximum and average speed of movement of highly qualified Chinese football players in the EG by 3.0 ± 0.02 and 1.0 ± 0.005 m/s, respectively, compared with the CG ($p < 0.05$).

Conclusions. The methodology for increasing the motor activity of highly qualified female football players in China, taking into account the variation in the intensity of training on small venues, includes many components, factors and various forms of improvement in real game conditions that determine the effectiveness of the development of aerobic and anaerobic endurance, speed abilities, as well as technical and tactical actions and interactions.

References

1. Antipov A.V., Kulishenko I.V., Polishkis M.M. Ot-senka sovremennykh metodov opredeleniya fizicheskoy rabotosposobnosti futbolistov [Evaluation of modern methods for determining the physical performance of football players]. *Teoriya i praktika fizicheskoy kultury*. 2020. No. 3. p. 20.
2. Guba V., Antipov A., Shagin N. Podgotovka futbolistov v vedushchikh klubakh Yevropy [Training of football players in the leading clubs in Europe]. 2nd ed., rev., supp. Moscow: Sport publ., 2021. 328 p.
3. Guba V.P., Polishkis M.M., Antipov A.V. et al. Futbol i futzal: tekhnologii otbora i podgotovki [Football and futsal: selection and preparation technologies]. Moscow: Prospekt publ., 2022. 224 p.
4. Lin Ya., Polishkis M.M. Tempy prirosta spetsialnoy podgotovlennosti sportsmenok v mini-futbole v protsesse razvitiya igrovoy vynoslivosti [Growth rate of special readiness of sportswomen in mini-football in the process of game endurance development]. *Fizicheskaya kultura: vospitaniye, obrazovaniye, trenirovka*. 2021. No. 1. pp. 17-19.