

TECHNICAL TRAINING OF HIGHLY SKILLED FIELD HOCKEY PLAYERS IN THE CONTEXT OF MODEL-PURPOSE APPROACH

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Annotation. The possibilities of improving sportsmanship hockey on grass-based modeling-based approach. The aim is to study the dynamics of technical preparedness of highly qualified hockey players on grass under the influence of experimental summer system of development a training process. The experiment involved 21 athlete (average age - 23.7 years). Installed speaker technical training of highly qualified hockey players on grass during the annual macrocycle. The identified model parameters of technical preparedness of the players on each of the main stages of the annual training cycle. Reserves in terms of technical training are seen in increasing performance testing exercises on speed. It is recommended to eliminate the imbalance in the use of specific and nonspecific means.

Key words: field hockey, technology, education, training, cycle, modeling, targeted approach.

Introduction

The improvement of the training process, aimed to achieve its most effective functioning, is possible due to the consideration of regularity, modern means and methods, peculiarities of the training process, its internal and external conditions and factors [5]. All the above mentioned factors influence the technical training optimization as well [7].

The level of the qualified sportsmen-players' technique are determined by their gifts, from one side, and by their training state, from the other side. It is already determined that those that is given by nature and achieved in the process of training contribute to the level of players' dribbling technique (when we talk about speed and accuracy) differently [3, 4, 8]. For example, for football players of superior class (excluding the super players), that have practically the same experience, this level is by 50-70% determined by their inherited ability to fulfill any movements accurately and by 5-10% by their motion activity development. The other contribution (from 20-45%) to the level of speed and accuracy of dribbling of qualified football players is made by training specific techniques [5]. It means that different players can achieve the same accuracy of handling to a greater extent by their natural talent to fulfill any movements accurately or by the training state.

The data concerning the contribution correlation of different factors to the level of their technique allow to conclude that the possibility to achieve higher dribbling accuracy in other equal conditions (talent, motion activity development) is determined by training.

The problems of technical training improvement in the playing kinds of sport were studied by J.D. Zheleznyak, J.M. Portnyi (2002, 2004), S.V. Golomazov, B.G. Chyrva (2000, 2008), G.A. Lysenchuk (2004), Z.L. Kozina, S.S. Iermakov (2012) [1], I.G. Maksimenko (2012) [2], M. Cieřlicka (2012) [8], F. Lebed (2006) [9] and others. Field hockey and its peculiarities were studied by V.M. Kostjuevych (2000, 2010), S.K. Sarsaniya, V.N. Seluyanov (1991), G.G. Udylov (1999), E.V. Fedotova (1999-2005) C. Sunderland M.E., Nevill (2005) [10], M. Tremayne, D.V. Thiel [11]. The study of the dynamics of the technical preparedness of qualified field hockey players according to the principles of model-purpose approach is of great interest now.

Aim of the research - to study the dynamics of technical preparedness of qualified field hockey players under the influence of the developed experimental summer system of study-training process structure.

Organization of the research. The research was carried out within the period of two playing seasons 2009-2011. The pedagogical experiment was performed on the team of top division of Ukrainian field hockey championship, participants of the international European tournaments (cup of European countries Cups and Champion Cup), "Olimpik-SHVSM"(Vinnytsia). 21 sportsmen took part in the pedagogical experiment, team average age is 23,7 years.

Results of the research and the discussion of the research.

The progress trends of modern field hockey require high level of technical-tactical skills together with the appropriate level of the main physical abilities such as speed, agility, endurance and speed-power abilities for a certain kind of sport. The determination of such abilities were expected in the process of tests choosing. Besides, dribbling, tackling, shooting, passing, throwing of the ball with a hockey stick at a long distance show the specific character of field hockey and the running test for 14,63 m with ball kicking out simulate the performance of penalty corner kick.

The results of the certifying experiment show that the dynamics of indices meet the demands of the competitive activity, the best results were fixed mainly in the 1st and 2nd competitive period. That's why the reserves in the indices of technical preparedness were seen in the improvement of doing test exercises such as speed and quality of performance.

The results of the ball throwing range with the hockey stick were higher than those that were fixed during the certifying experiment but they didn't show the significant difference at none of the stages of the annual training cycle. (F. 1)

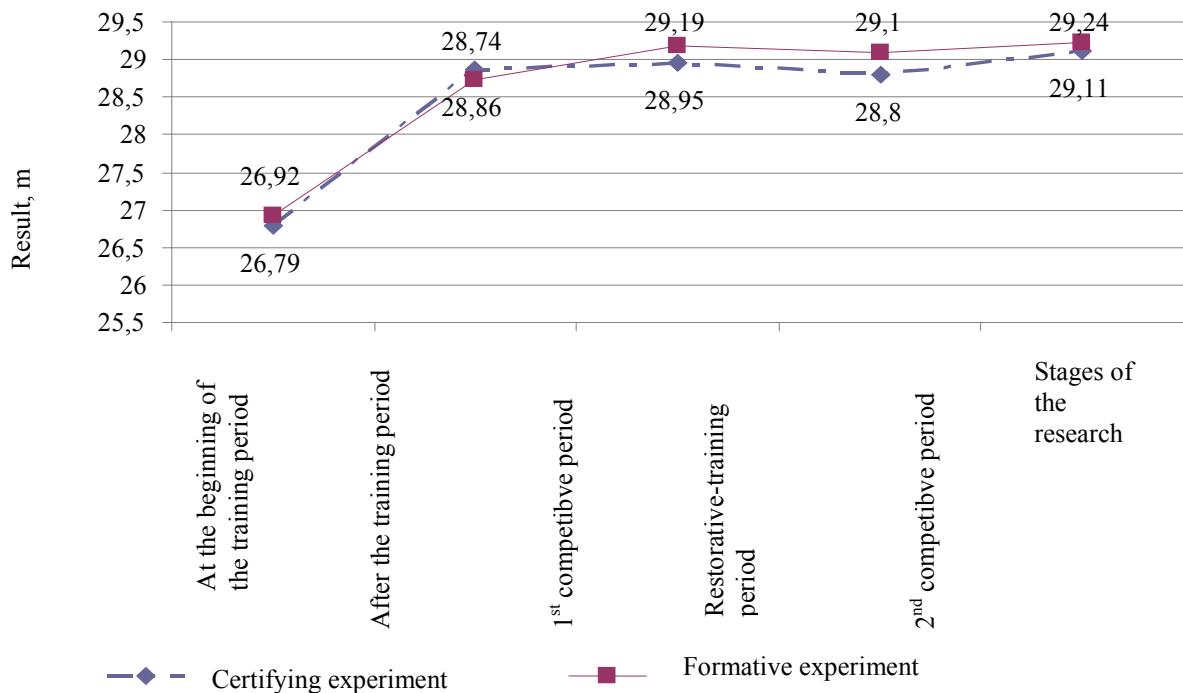


Figure 1. The annual dynamics of the test results " The ball throwing range with the hockey stick " at different stages of the research.

Running speed at the distance of 14,63 m with the ball kicking during the formative experiment differed at the previous year. Thus, the best results during the certifying period were fixed at once after the training period, the results were on the average 2,23 cm, later the speed reduced and didn't reach the previous results. It means that the highest level of speed together with speed-strength movements (kicking out the ball with the hockey stick) weren't reached during the competitive period. The results of the qualified field hockey players during the formative experiment had the rising tendency to the 1st competitive period with the 2nd phase of the relative stabilization of this index at the following stages of training (F.2). The absolute results didn't differ much from the results of the previous year and that's why they didn't have any statistic difference ($P > 0,05$).

The following two indices of technical preparedness are characterized by the speed of exercises performing (F. 3,5) and the quality of technical skill - dribbling, shot and ball passing (F. 4,6). The indices curve was rather similar in both tests, but the results in the formative experiment were higher than the previous results and they didn't differ in speed at the restorative-training stage. The disbalance in using specific and nonspecific means was taken into consideration and it led to such good results. The best results were achieved in the 2nd competitive period.

The quality indices in the above mentioned tests were also better than the previous ones but they didn't have statistic veracity ($P > 0,05$). It can be explained by the conditions of test performing and by quite high results of field hockey players.

So, for example, in the first test, which was difficult enough, the most possible result could be 15 points (The field hockey player had to shot neatly 5 times to the side part of the goal, dribbling quickly before), the highest result was 9 points, the lowest - 5. In the test, where the ball passing at the target was performed, the best result was 5 points (the most possible), and the lowest - 3 points.

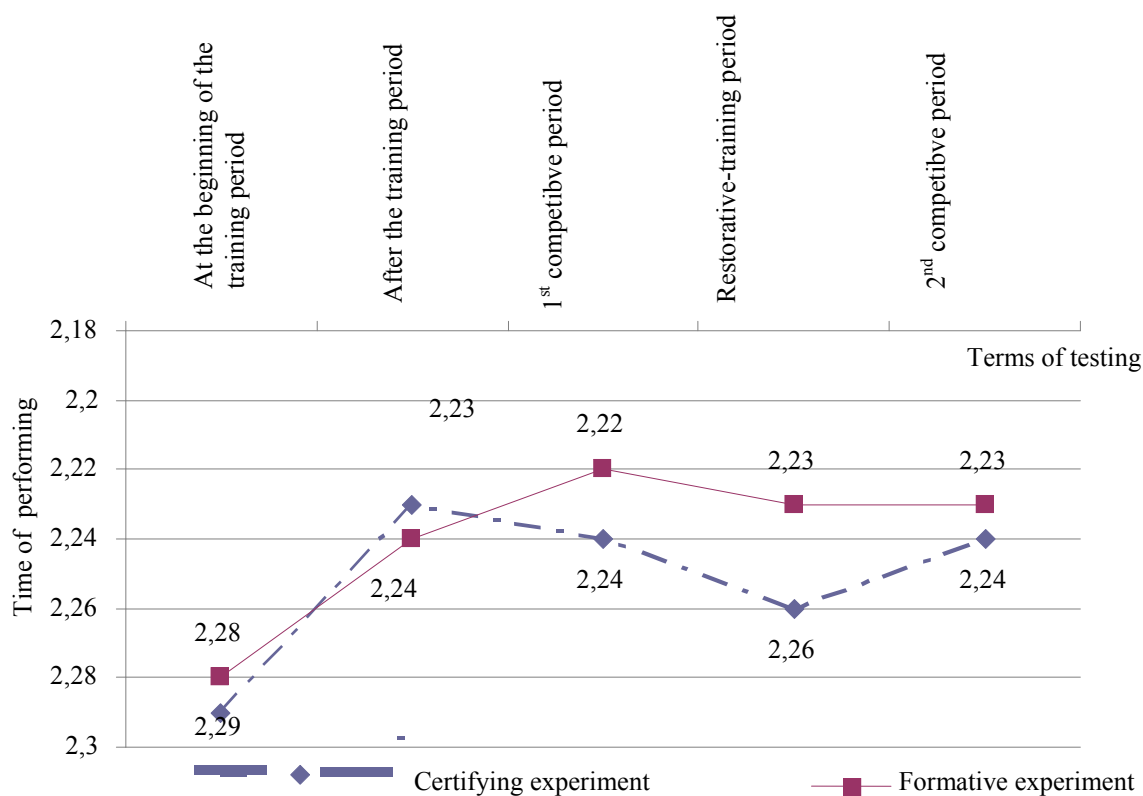


Figure 2. The annual dynamics of the results in the test "14,63 m distance running with the ball kicking out" at different stages of the research.

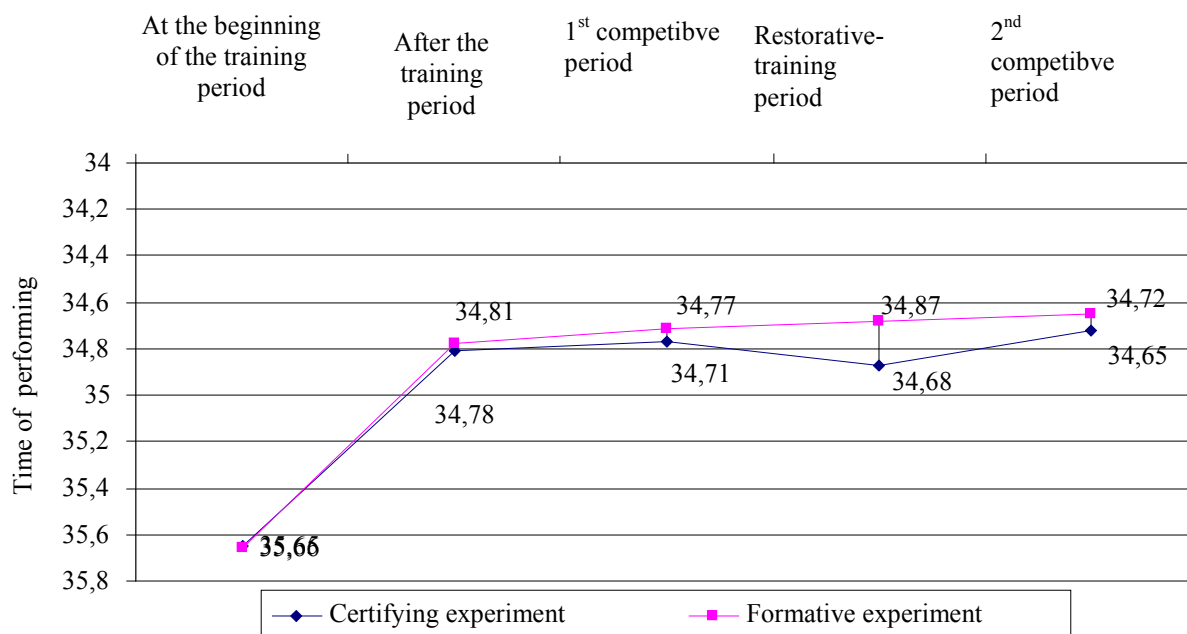


Figure 3. The annual dynamics of the results in the test "Dribbling, ball passing, shot" in speed performing at different stages of the research.

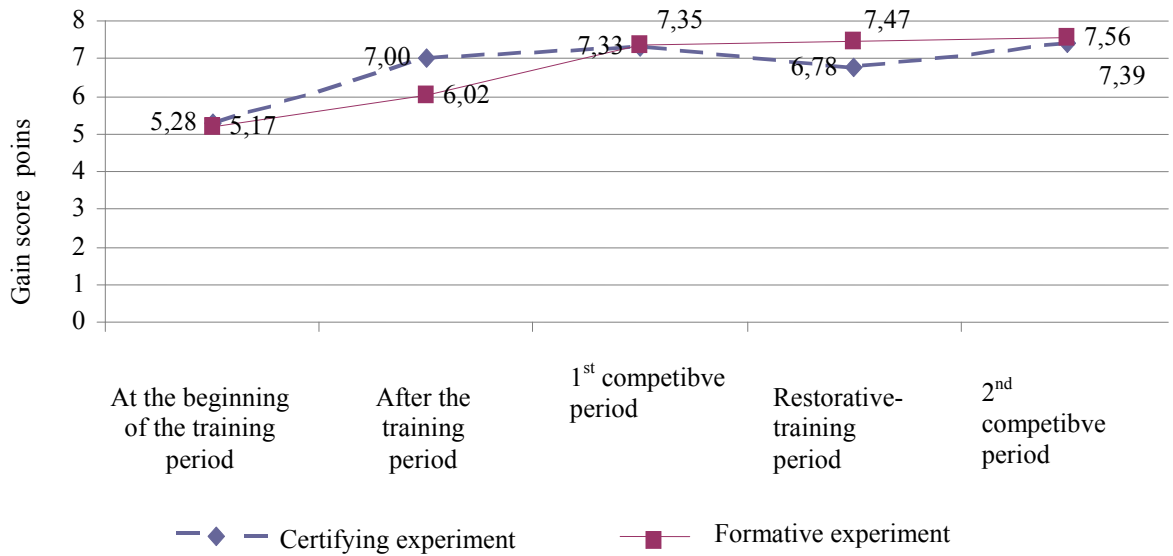


Figure 4. The annual dynamics of the results in the test "Dribbling, ball passing, shot" in quality of performing at different stages of the research.

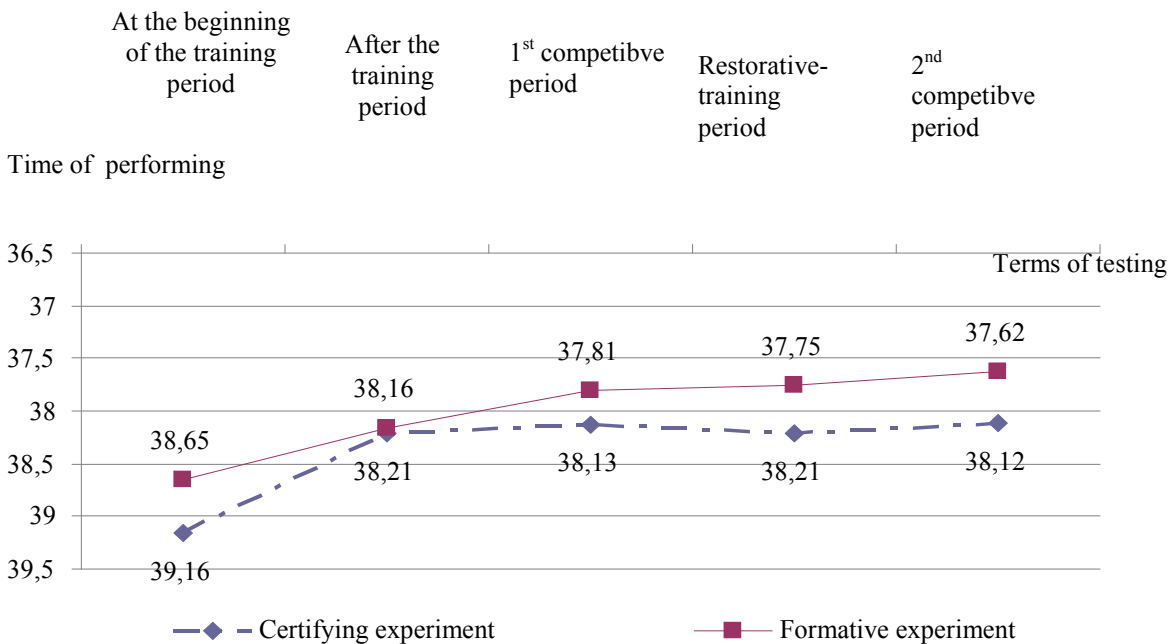


Figure 5. The annual dynamics of the results in the test "Dribbling and shot" in speed performing at different stages of the research.

Conclusion. The results of the monitor tests of the qualified field hockey players, that participated in the research allowed us to determine the dynamics of the indices of the technical preparedness at different stages of the annual training cycle.

The positive dynamics of field hockey players' preparedness during the annual training cycle confirms the effectiveness of the experimental programme of training taking into consideration the aims at different stages of the training cycle. In different cases these changes had statistic veracity in comparison with the results of the certifying stage of the research ($P > 0,05$), that confirms scientific and practical value of the research.

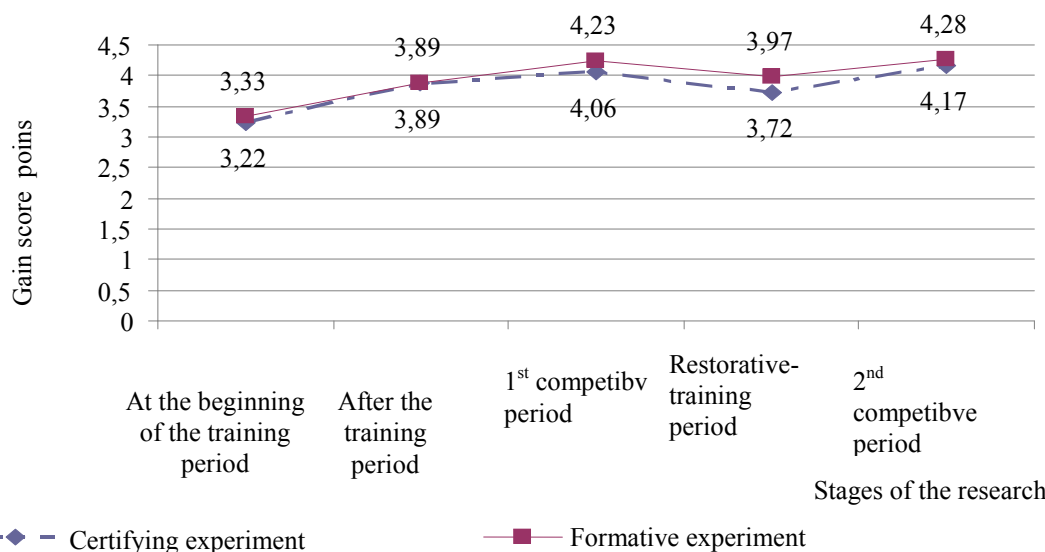


Figure 6. The annual dynamics of the results in the test "Dribbling and shot" in quality of performing at different stages of the research.

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