

III НАПРЯМ. СУЧАСНІ ПІДХОДИ ДО ПІДГОТОВКИ СПОРТСМЕНІВ.

Modern Approaches to Athletes' Preparation.

THE QUALITY OF THE EQUILIBRIUM FUNCTION OF BILLIARDS PLAYERS

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Abstract. The technique competitive activities of billiards players are the system of methods and actions specific to this sport. Technical training is aimed at mastering the technique and improving technical skills in the types and disciplines of billiards. The process of developing and improving technical skills include: creating an idea of different types of technique strokes in billiards and forming attitudes towards their learning, mastery of the principles of these types of technology shocks, the formation of rational kinematic and dynamic structures of movements based on athletes' individual characteristics, improving purposeful variation technique for external conditions change and different functional state of the body, improving the reliability and efficiency of equipment in extreme action sports competitive circumstances [3, 4].

The body of billiards players during a stroke must remain in the position of maximum sustainable equilibrium. This is achieved through the optimal height of placing the common center of the body mass over the support of sufficient greatness area, stability angles of the body in different planes of space. The growth of duration and magnitude of static-dynamic loads in the competitive activity of billiards players, necessitates the intensification of the athletes' preparation process by means of special physical training. Coordination of motions, level of spatial and temporal exactness of motions, fineness of differentiation of muscular efforts, vestibular stability, speed of reactions, the level of developing physical flairs and possibilities of their realization are made the basis of elite athletes' preparedness in such sport as billiards. There is an urgent need to determine the *quality of the equilibrium function of the billiards players with different skill level* [1, 2, 5].

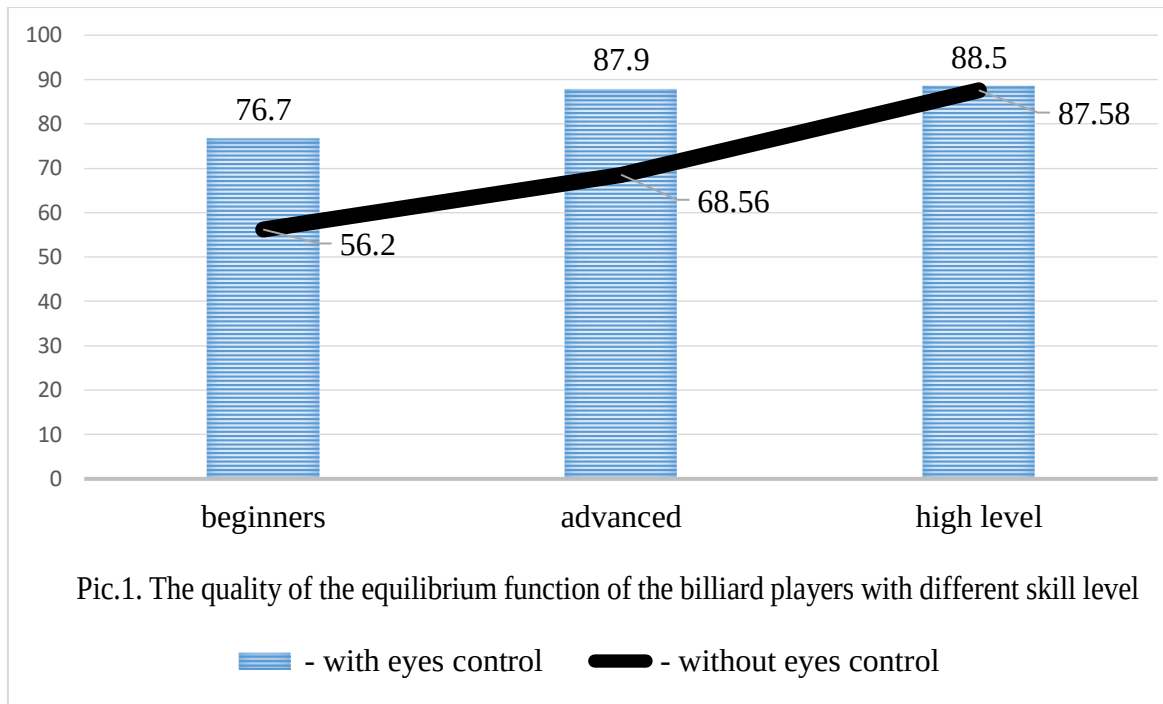
Key words: billiards players, kinetic stability, balance, feeling, stabilograms, *quality of the equilibrium function*.

Aim of research: to analyse the level of the billiards player's body kinetic stability by using Stabilographic control.

Methods: analysis of the literature, questionnaires, Romberg tests, methods of mathematical statistics.

Results and discussion. In our research, the Stabilography method was used for analyzing the level of the kinetic stability of the billiards player's body. To assess the level of developing the equilibrium function the applied standard and sophisticated Romberg tests were used. The Romberg tests consisted each of two samples: open and closed eyes, using in the first case the visual stimulation in the form of alternating colored circles on the screen, and in the second case - in the form of acoustic stimulation tones [2]. Based on a comparison of the two samples stabilograms we can determine the degree of visual stability of standing, the degree of feedback provided by the optical sensitivity - so-called the coefficient of Romberg. The higher the percentage is, the better-coordinated athletes are.

The quality of the equilibrium function (QEF) is one of the most important informative stabilometric indicators that characterize the mortgaged property genetically personalized postural system of a person. The higher value is than the QEF, the better a person can maintain a balance. This, in principle, does not affect the quality of life, or perform any simple movements, but indicates proficiency of different people for careers related to the increased requirements for static-dynamic and vestibular stability of the athletes' organism. As expected, with an increase in the level of the billiards player's preparedness, the percentage of the equilibrium function quality increases too, as shown in Picture. 1. But more interesting is the fact of the practical equality of the stability indicators with and without visual control of highly qualified billiards players. This indicates the development of experienced athletes' high-level tactile sensations.



Conclusion.

The body of a billiards player during a stroke must remain in the position of maximum sustainable equilibrium. This is achieved through the optimal height of placing the common center of body mass over the support of sufficient greatness area of support, stability angles of the body in different planes of space. Feet should be placed at an angle of 30 to 45 degrees to the line of sight. Increasing in the level of preparedness the billiards player's percentage of the *equilibrium function quality* is also increased too with developing high-level tactile sensations of experienced athletes. Therefore, balance and special feeling are very important parts of sports result in billiards.

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