

HANDBALL SELECTION TAKING INTO ACCOUNT THE COORDINATIVE ABILITIES DEVELOPMENT LEVEL

JURAVLE Ileana¹

¹Ștefan cel Mare University of Suceava, Romania

Keywords: selection, handball, coordinative abilities, training.

Abstract: This research paper analyze the opinion of various experts regarding the importance in developing the coordinative abilities level to improve selection system of elite handball players.

Selection process is the decisive factor in creating the assumptions for achieving high performances in handball game. It can be assumed that the selection process is conditioned by knowing firstly the growth and developing lows of the human body, and secondly the phenomena that underlie the physical and mental evolution of the future handball players.

Introduction

The basis of each sports discipline consists in technique and its application ability in terms of modern sports competitions [1].

Modern handball game involves some changes in terms of speed and dynamics of game. Field movement, attractive passes and throws have a positive influence on development, but also its popularity among players, regardless of age or sex [2].

Materials and methods

These study research methods consisted in literature studying (articles and publications, manuals, tutorials, etc.), where performed analysis and comparison of the researchers obtained data and discussions with experts regarding the chosen theme.

Team handball is a complex game that requires players' aerobic and anaerobic capacity development [3]. Motor abilities, mobility, jumping, sprinting and throwing speed represent physical activities that contribute to achieving the performance [4]. On the other hand, the performance requires explosive power in the legs and arms, sprint speed, kinesthetic sense in handling the ball. Equally important are hand surface and length as well as athlete stature. Those anthropometric characteristics help the athlete to perform in modern game of handball conditions [5].

Obtaining sports performance is determined by a number of factors and principles that represent important premises for planning and modeling training [6].

The training process is important because it influences sports game action and has implications for their entire training process. The various training should be done in the gym, but also outside the training room as coordinative capacity development depends not only of training with the ball, but also performing exercises with or without other auxiliary equipment.

Performance level is influenced by a set of biological characteristics (physiological and morphological) that influence levels of technical, mental and tactical adaptation well as players body system ability to transmit neurological signals appropriate for the type of muscle contractions. This shows the importance of neuro-muscular system, the main operating motor musculoskeletal system [7].

Sports training system influence neurological activity, improving the quality of transmission of motor impulses and shorten reaction time with increasing stimulus speed transmission, which ultimately lead to improved muscle coordination processes for each muscle.

Direction of motor response depends on information from the neurological system, from the internal and / or external. Although there are no specialized receptors for duration and time, central nervous system can extract this data from information received from other receptors, through which speed can be improved. This is achieved by increasing the neurological system ability that quickly switch from excitation to inhibition condition, increasing neuro-muscular coordination, intra-and inter-muscular and also increasing the receptor efficiency. However, this indicates that coordinative abilities development depends on feeling the motor contraction intensity, duration and motor tempo contraction. Intervals between stimuli are important factors influencing muscle contraction, besides the frequency and intensity of the stimulus [8].

It was established that the identification and selection of sporting talent is a lengthy process that takes place over several years of an athlete's career. Their selection for a particular branch of sport involves a complex process of the specialists, because they have to predict and anticipate the player potential based on morphological characteristics, anthropometric, and the degree of development of motor skills and qualities [9].

At present it is not known any selection method to ensure identification of talent in the game of handball. A selection technique is

the one based on a standard training where athletes follow the same program. Those good progress after a certain period, are selected as potential talent. Of course, the selection process conducted over a period of several years, taking into account the results according to biological characteristics, mental capacity development and psychological adaptation to difficulty training is a more effective method.

In handball game, organizing the selection process aims to cover a large number of candidates for selection and tries to actually use the most appropriate involving diagnostic methods. This requires covering some stages: preliminary selection, basic training phase, basic selection phase, temporary post specialization phase, solid selection phase, final specialization phase [10].

Regarding selection for a specific handball position, Trninić, S., made gradual moments to be completed by professionals. The staging includes three main sequences. The first phase is performed player detection and potential recognition, making a difference in chronological and biological data age after comparing with other candidates data. The second phase starts with assessing the athletes quality, progress ability analysis is an interview conducted with various experts, where each individual gives a psycho diagnostic. The third phase consists in actual selection, based on certain criteria [11]. Moreover, it classifies the selection of athletes into three main phases: players' potential detection and recognition, player orientation and selection and players quality development.

Handball game performance is predetermined by athletes' motor abilities and motor qualities, which are essential for high intensity efforts [12].

Regarding the motor qualities, coordinative abilities plays an important role in the development of motor abilities [13], which is very important in handball game. They accompanying the motor acts, which confers certain performance indexes, such as speed, direction, tempo, accuracy, rhythm, etc. This requires players' ingenuity, alertness, concentration, reaction speed, rhythm, attention, balance, anticipation. These qualities fall within the concept of "coordinative abilities" [14].

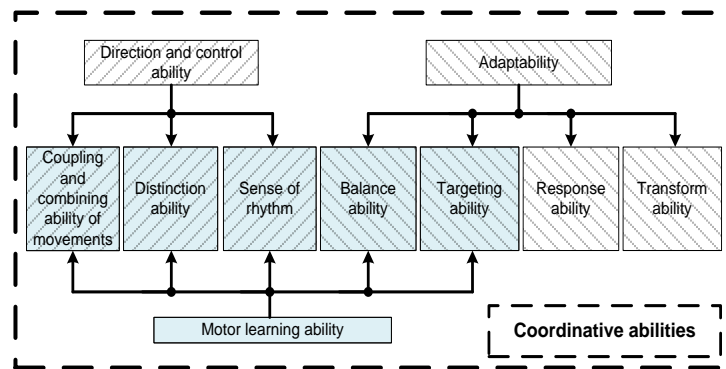


Figure 2. Coordinative abilities classification

Development of coordinative abilities influences motor skills development, technical efficiency performance actions, and tactical handball game.

A systematic training of coordinative abilities can be achieved by exploiting other than handball sports (volleyball, basketball, football, etc..), which provides development opportunities not only orientation in space, and kinesthetic differentiation (target throwing the ball different weights from different distances and heights), balance (pushing games, jumping on stage, hitting the ball from standing on one leg on the bench, on the floor, the beam), the reaction rate (at different signals change steps with ball handling) and even rhythm (rhythmic exchange of balls with a partner or group, dribbling).

Value of future performance made by handball player depends on the selected "human material" quality [15].

Besides anthropometric dimensions, capacities coordinative tops the rankings made by researchers (Michael I., Prescorniță A) in terms of their importance in the selection process sport.

Two Egyptian scientists, Bakhit M.A. and Hamad H.Y. applied a test "Complex Coordinative Abilities Test" for a sample of subjects, the results highlighting the importance of capacity development coordinative for sports games, and therefore for handball game. [16]. In the same direction, researcher P. Hirtz German showed in a study that there is a direct relationship between physical development and coordinative capacity development, two key elements in the process of selection of sports [17].

Results and conclusions

Improving coordinative abilities through appropriate and specific methods helps to technical skills training for a faster game and tactical behavior of handball performance.

The coordinative abilities development level affects the process of selecting handball players, thereby improving the quality of performers' future.

Therefore, in athletes selection process must be consider the coordinative abilities development level, along with anthropometric characteristics, hereditary and acquired abilities.

Bibliography

- [1] Czyszczon, K. K., Dybińska, E., (2008), *Co-ordination Abilities and Sports Result of 11-12-year-old Swimmers*, Science in Swimming, Nr.2, pp.69-78
- [2] Bojić, I., Petković, D., Kocić, M., (2010), *Influence of Different Training Programmes on Basic Coordination of Female Handball Players*, Acta Kinesiologica, Nr.4, pp. 71-74
- [3] Delamarce P, Gratas A, Beillot J, Dassonville J, Rochcongar P, Lessard Y., (1987), *Extent of lactic anaerobic metabolism in handballers*, International Journal of Sports Medicine, Nr. 8, pp 55-59
- [4] Sibila M., (1997), *Initial and further selection of children gifted for handball on the basis of some chosen morphological and motor parameters*, Handball EHF Periodical, Nr. 1, pp. 7-17
- [5] Zapartidis I., Vareltzis I., Gouvali M., Kororos P., (2009), *Physical fitness and anthropometric characteristics in different levels of young team handball players*, Open Sports Sciences Journal, Nr. 2, pp.22-28
- [6] Săgărceanu, A., Carp, I., (2006), *Argumentarea experimentală a eficienței selecției sportive în tenis la diverse etape ale pregătirii multianuale*, Știința culturii fizice, USEFS, Chișinău, pp.41-45

Titlu: Selecția în jocul de handbal luând în considerare nivelul de dezvoltare a capacităților coordinative

Cuvinte cheie: handbal, selecție, formare, capacități coordinative

Rezumat: Această lucrare analizează opinia diferiților experți în domeniu cu privire la importanța dezvoltării capacităților coordinative pentru îmbunătățirea sistemul de selecție a jucătorilor de handbal de elită. Procesul de selecție este factorul decisiv în crearea de ipoteze pentru

realizarea de performanțe ridicate în jocul de handbal. Se presupune că procesul de selecție este condiționat de cunoașterea proceselor de creștere și dezvoltarea ale corpului uman, precum și ale fenomenele care stau la baza evoluției fizice și mentale ale viitorilor jucători de handbal.

Titre: Sélection dans le jeu de handball examen de la coordination du renforcement des capacités

Mots-clés: handball, la sélection, la formation, la coordination des capacités

Résumé: Cet article analyse les différents avis d'experts sur l'importance du renforcement des capacités pour améliorer la coordination de sélection de système d'élite joueurs de handball.

Le processus de sélection est le facteur décisif dans la création d'hypothèses pour atteindre la haute performance dans la pratique du handball. On suppose que le processus de sélection est conditionnée par la connaissance des processus de croissance et de développement du corps humain, et les phénomènes qui sous-tendent le développement physique et mental des joueurs de handball à venir.