

CONSIDERATIONS REGARDING PHYSICAL TRAINING IN HANDBALL

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Abstract

The training orientation of handball players should be carried out in the direction of the improvement and efficient execution of the short and explosive actions because, as it is the main way of progress in the contemporary handball. It is considered that a proper physical preparation is crucial for the enforcement and improvement of the technical training, moreover, it determines the achievement of tactical training. In top level sports for seniors it should be underlined the fact, that the development level of strenght influences the manifestation degree of other motor qualities, and also, the quality and efficiency of the technical and tactical executions, all these aspects building a complex methodic approach of its development. Training for strength purpose comprises not only the raising of maxim indicators of strength qualities but also, comprises the improvement of the capacities for their use in the process of the competitional activity, that is based on the development optimization degree of the strength qualities and the improvement of the sport technique. The purpose of the study was to identify some aspects of the physical training specific for handball game in the current period time with emphasis on motor skill development - strength. In conducting this study, I have utilized a series of methods that served to formulate some strength conclusions useful for the experimental research: the study of special literature, the comparative method, the analyzing and interpreting data method in order to make an objective analysis of the current situation regarding the training of handball players. Obtaining sports performance is conditioned by achieving an optimal level for each component of sports training in accordance with the individual and group potential, the training level and the established training and competition objectives.

Keywords: handball, physical training, performance, strength

Introduction

The training orientation of the handball players should be carried out in the direction of improvement and efficient execution of short and explosive actions, as it is the main way of progress in the contemporary handball.

Physical training is the component of sports training through which the development of motor skills, body morphofunctional indices is being pursued. It is divided into: general physical training and specific physical training (Ozolin N.G., 1972, p. 127; Şiclovan, I., 1977, p. 15-16; Nicu, A., coordinator, 2002, p. 296-297).

Physical training is a topical theme being often found in works dealing with subjects in the field of sports training. It is presented in all stages of sports training, having different proportions depending on the established training objectives, the age of the practitioners, the level of their training. It is considered that good physical training is the foundation for strengthening and improvement of technical training, which in turn, conditions the achievement of tactical training conditional.

Physical training has as its main objective the development of basic and specific motor qualities of players by using the most effective methods and means of training. "Physical training is a process of physical fitness education, which develops all the organs and functions of the body, improves motor skills, forms a great number of moving skills, thus creating the basis for on-going successful pursuit of sports activity" (Ghermănescu, I.K., Gogăltan, V., Jianu, E., Negulescu I., 1983, p. 188).; "level of motric development of the individual reached in the process of systematic repetition of physical exercises" (Cercel, P., 1983, p. 13).; "structural component of the game, that essentially potentiates the entire performance capacity of the player (team)" (Colibaba-Evuleţ D., Bota I., 1998, p. 99).; "the physical ability of a player is likened to the overall effort potential of a player, thanks to which he manages to constantly perform the game tasks" (Colibaba-Evuleţ D., Bota I., 1998, p. 99).

"The main objectives of physical training are to increase the physiological potential of the player and develop biometrical qualities at the highest level" (Bompa, O.T., 2002, p. 48-49).

"Current physical training tilts the balance towards specific physical training to the detriment of the general one. This is obvious, as

this specific training refers to younger and younger ages” (Gheorghe, D., 2005, p. 54-55).

"The main content of physical training is the development of motor skills and particularly the development of resistance, strength, speed and skill ... physical training should be oriented towards the development of the physical qualities required in sports practiced along an increased physical ability and in good health status” (Harre, D., 1973, p. 12).

Teodorescu S., 2010, p. 102 believes that "physical training is a system of measures, means and methods by which the development of morphological indices of functional capacity, of basic motor skills and specific to different sports branches is ensured. It implies, in fact, the development of motor qualities and of capacity for effort.”

"Physical training is the organized and hierarchical assembly of training procedures aimed at developing and using the physical qualities of the player. It must manifest itself permanently at the different levels of the sports training and serve the priority technical and tactical aspects of the practiced activity” (Pradet, M., 2000, p. 23).

The planning of sports training and therefore of physical training is well defined in the studied bibliographic material and models are presented during the preparatory stages in the structure of the annual training plan (Colibaba-Evuleț D., Bota I., 1998, p. 135-142; Bompa T., 2002, p. 302-327).

Theoretically, the issue of strength development is well covered in the special literature, both in theoretical works and methodology of sports training, generally speaking, as well in works that develop sports training in handball game.

Strength is the ability of the individual to achieve efforts of defeating, maintaining or yielding in relation to an external or internal resistance, by contraction of one or more muscle groups (Dragnea, A., Mate-Teodorescu, S., M., 2002, p. 235-236; Leuciuc F., 2010, p. 13). It is the individual biological and mental ability to overcome resistance by means of muscle contraction (Nicu A., 1999, p. 126). Authors Simion Gh., Mihăilă I., Stănculescu G. (2011, p. 77) mention the notion of strength capacity, considering that it is the property of the locomotor apparatus to achieve muscle contractions in order to overcome external resistors. The strength is conditioned by the nervous system acting mainly on the cortical floor pathway and the muscular system, depending on the degree of load related to the maximum isometric strength.

In the context of the topic with reference to the capacity of strength, we can say that in top level sports for seniors, it is obvious that the development level of strength influences the degree of manifestation of the other motor skills, as well as the quality and effectiveness of technical and tactical executions which leads to a complex methodological approach of its development. For handball game, experts specify the need to identify the specific forms of strength manifestation as being vital and the knowledge of the strength relationship with the other motor skills is essential to determine its role and place in the general and specific physical training. For practicing handball at a high level, the strength-speed, strength-resistance, strength-skill, strength-mobility ratios are important.

The motoric skill of strength is presented in many forms in a handball game at senior level: explosive strength (the strength of the ball throw and the specific strength necessary for goalkeepers to achieve their actions), explosive strength in resistance (the strength of the detachment and movement), the maximum dynamic strength (the fighting strength), or in the complex forms (speed-strength-resistance; strength-skill-resistance, strength-speed-skill) (Cercel P., 1975, p. 75; Ghermănescu, I.K., Gogăltan, V., Jianu, E., Negulescu I., 1983, p. 194-197; Espar X., 2001, p. 87-91; Hantău C., 2000, p. 141-147).

The process of strength training is oriented to the development of various qualities of strength: maximum and explosive strength, strength resistance. Strength training provides not only to increase the maximum indices of strength qualities, but also to improve the capabilities for their use in the process of competitive activity, which is based on their development level optimization of strength skill and the improvement of sports technique.

Material and method

The aim of the study was to identify some aspects of the physical training specific to handball game in the current period, with emphasis on motor skills development – strength.

The objectives of the study are:

1. Studying the special literature on the subject and analyzing the data obtained from the literature study.
2. Developing a personal point of view on the achievement of specific physical training in handball and establishing conclusions for the subsequent methodological approach.

In conducting this study, we have used a number of methods contributing to the formulation of useful conclusions for basic experimental research (Gagea, A., 1999, p. 222-225): the study of special literature, the comparative method, the method of analysis and data interpretation, in order to make an objective analysis of the current situation regarding the training of handball players.

Discussions

A high level of physical training is one of the important conditions for increasing competition and training efforts. Physical training is absolutely necessary for the player of any age, qualification, sports branch, being divided into general physical training (GPT) and special physical training (SPT). The correlation of the means in the player's training depends on the achieved goals, the age, the qualification and the individual particularities of the player, the sports branch, the stages and the periods of the training process.

The improvement of strength skills is carried out simultaneously with the formation of technical mastery. The wide use of special strength exercises allows a rapid and effective correlation of the increased level of strength possibilities with the whole complex of other components that ensure the effectiveness of the competitive activity. In the execution of exercises for the development of strength resistance in various sports samples there is important the activity in a tempo ensuring movements with maximum strength. Thus, a more intensive activity occurs when there is a correlation between the tempo and the size of the efforts, which contributes to the increase of the players' capacities necessary for the use of the strength potential and its manifestation in the conditions of the competitive activity.

In the current handball game, the specific effort is based on all four motric qualities, which manifest in specific forms (Ghermănescu, I.K., Gogăltan, V., Jianu, E., Negulescu I., 1983, p. 191-198):

- strength required for effective execution of game actions in attack and defense;
- speed of movement, speed of execution, reaction speed - applied according to the actions of teammates and opponents;
- general resistance and specific resistance throughout the game;

– the complexity of the technical-tactical actions/processes represented by the general and specific skill.

During a handball game, short and explosive actions represent only 9-12% of the time, but they are decisive for the performance of the game tasks with efficiency and for obtaining sports performance (Bon, M., 2002, p. 35-40; D'Alonso Ferreira, A., 2010, p. 73-82).

Conclusions

Following the documentary analysis on physical training and especially the development of the strength capacity for seniors in top level handball, the following conclusions were formulated:

- there is widely recognized the importance of physical training, stating that this is one of the main factors in sports training, the indispensable support of technical and tactical achievements, the basis on which sports training is based, determining performance in training and competitions, being the support for the development of the other components of the training;

- the physical training is mainly oriented to the development of the effort capacity specific to the sports branch, as well as to the development of motor skills, combined in a priority and differentiated manner, determining the specific yield;

- in the handball game the specific physical training represents the modeling of the basic motor skills, in order to acquire the highest morphological and functional indices, in accordance with the technical and tactical game requirements;

- strength development is obtained by different methods and methodical processes, its development depends on many factors, including: central factors, peripheral factors, psychic factors, methodical factors, environmental factors, etc.

The study of special literature underlines the following requirements for the application of training methods:

- the choice of methods should be made according to the individual particularities (age, training level, goals, etc.);

- the methods should be carried out in a dosage, sequence and continuity ensuring positive effects throughout the training;

- the methods should be adapted to the content, structure and dynamics of the handball game;

- the development methods of various factors of training should be in accordance with the feature of each factor and, at the same time, make a connection between them.

Obtaining sports performance is conditioned by achieving an optimal level for each component of sports training in accordance with the individual and group potential, the training level and the established training and competition objectives.

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ASPECTE ALE PREGĂTIRII FIZICE ÎN HANDBAL

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Rezumat

Orientarea pregătirii handbaliștilor trebuie realizată în direcția perfecționării și a execuției eficiente a acțiunilor scurte și explozive, deoarece este principala cale de progres în handbalul contemporan. Se consideră că o bună pregătire fizică este fundamentul pentru consolidarea și perfecționarea pregătirii tehnice, care la rândul ei condiționează realizarea pregătirii tactice. În sportul de performanță la nivel de seniori este evidențiat faptul că nivelul de dezvoltare al forței influențează gradul de manifestare al celorlalte calități motrice, precum că calitatea și eficiența execuțiilor tehnico-tactice, fapt ce determină o abordare metodică complexă a dezvoltării acesteia. Pregătirea pentru forță prevede nu doar creșterea indicilor maximi ai calităților de forță, ci și perfecționarea capacităților pentru utilizarea lor în procesul activității

competiționale, care se bazează pe optimizarea nivelului de dezvoltare a calităților de forță și perfecționare a tehnicii sportive. Scopul studiului a fost de a identifica unele aspecte ale pregătirii fizice specifice jocului de handbal în perioada actuală, cu accent pe dezvoltarea aptitudinii motrice forță. În realizarea studiului am utilizat o serie de metode care au contribuit la formularea unor concluzii utile pentru realizarea cercetării experimentale: studierii literaturii de specialitate, comparativă, analizei și interpretării datelor, cu scopul de a realiza o analiză obiectivă a situației actuale privind pregătirea sportivă a handbaliștilor. Obținerea de performanțe sportive este condiționată de atingerea unui nivel optim pentru fiecare componentă a antrenamentului sportiv, în concordanță cu potențialul individual și de grup, nivelul de pregătire și obiectivele de pregătire și competiționale stabilite.

Cuvinte cheie: handbal, pregătire fizică, performanță, forță