



EFFECT OF PHYSICAL AND TECHNICAL TRAINING ON THE SHARE OF INDIVIDUAL AND COLLECTIVE TACTICAL ACTIONS, IN A OFFICIAL GAME OF HANDBALL, AT THE JUNIORS TWO (JUN. II)

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Abstract

Objective. The purpose of this paper is to present and demonstrate effects of an physical and technical optimal training, scientific and rigorously conducted on the share of the individual tactical actions and collective tactical combinations, in an official handball game.

Methods. To verify the hypothesis and to achieve the purpose of this paper, there were used: specialty literature study method, the observation method, the experimental method, the game protocols elaboration and a individual observation records method, statistical-mathematical method, graphical method and data interpretation method.

Results. We notice that, at the first game, without a special physical and technical training, the total share of a individual and collective tactical actions, was 55,33% percents, and in the second game, the total share of individual and collective tactic actions was 70% percents, progress being 14,67% percents.

Conclusions. At the end, after studying game protocols and an individual observation records, we can say that the hypothesis was confirmed and the purpose has been reached.

So we can conclude that through a physical and technical optimal training rigorous and scientific conducted, we can reach a positive effect on share of individual and collective actions, in an official game.

Key words: preparation, effect, on share, training, physical, technical, tactics, handball game.

Introduction

Handball as a scientific discipline is part of the theory and methodology of physical education and sport, with the proper domain of study the game of handball in the technical, tactical, physical, theoretical, methodological, organisational and psychological, sociological implications and selection and teaching.

Handball contributes to the acquisition of basic motor skills and specific knowledge of specific technical and tactical sport.

It is a dynamic game and requires the subjects an intense exercise and a great psychological commitment.

Handball game practiced scientifically effort contributes through the effects of the physically and mentally efforts, to strengthen health, physical and intellectual capacity, volition and moral practitioners.

Handball game is considered a basic overview of human motor skills such as running, jumping, catching and throwing, with positive effects on the physical preparation of athletes from other branches.

Handball is a collective game with a strong dynamic character because it takes place in a very fast rhythm.

There is a rapidly evolution of the game recording trends such as improving the technique to master at a growing number of players and fewer technical errors, obvious increase game speed, with a good grasp of technique and tactics, individual actions are increasingly subordinated to the game collectively through the obvious strategies to most teams, use with cunning precision and security means collective tactics, specializing in jobs, both in attack and defense, is a

growing trend evident their efficiency and positive developments, request all the qualities thought by judging each point in the game.

In handball, sports performance is determined by several factors which make the mutual interdependence of these factors being variable and dependent on the skill of the individual sports, team, and the specificity of each national handball schools.

Sports training specialists in this field concerns the result of concerns that have resulted in a set of principles and knowledge to the process of preparing athletes called Sports Training Theory and Methodology.

If we consider the views, opinions, rankings and specialists in the field theories, we can say that: the athlete is a licensed practitioner, competitor that focuses on performance.

Sports Training Theory and Methodology defined sports training as "Systematic and continuous process of teaching gradually developed, the human body adapt to intense physical and mental efforts to obtain a sports performance."

A definition of athletic training is given in the "terminology dictionary", according to which sport training is a "systematic and continuous process developed gradually teaching the human body adapt to the physical, technical, tactical and psychological intense in order to achieve high results in one of the forms of competitive practice exercise".

The concept of training includes training bases representing all the laws and principles underlying the established sports training and conditioning sports training theory, which in turn is a

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system of principles and methods that makes and structures sports training, according to the principles of the training that involves basic ideas, the pedagogical, psychological, physiological, hygienic and others conducting structures and leadership training process.

A. Dragnea in "Sports Training" reveals that "sports training is a long process, designed as a motor and functional performance in order to achieve a competitive behavior in a contest, this behavior is the result of upper body adaptation to physical effort and mental intense " (A. Dragnea, 1993).

The physical training as a "complex educational process, organized over a long period and completed by successive adjustments, optimal, up to the maximum adjustment, expressed as maximum sports achievement mastery and maintaining it in time".

Gh. Cârstea in 1999, considers training as an "instructive process - educational systematically and continuously carried out gradually, to adapt the body to intense physical and mental effort in order to obtain high results in one of the forms of competitive practice physical exercises/drills ".

Problem statement

Nicu A. (1994) says that methodology evolves constantly training and support the objective of it is physiological support. In his view, training is seen as a complex, comprehensive, psycho-social, morpho-functional and methodical teaching, which aims to create an individual with a high level of sanogenesis, a higher degree of resistance to various environmental factors or endogenous, with great effort and balance capacity and cortical neuro-endocrine-vegetative appropriate, all embodied in the possibility of obtaining special sporting performance.

He lays some physiological training principles such as: accessibility (the ability to support an effort), versatility (development complex multilateral athlete), individualization (correlation of age, sex, family history and personal status health, functional capacity), continuity (the continuity of training), grading effort (gradual increase in effort), use of sustained efforts in training (great efforts are effective means for increasing functional organism, stability of internal environment - homeostasis), alternating with the recovery effort (effort is the ergotrope, recovery is the trophotrop part).

Sport training has principles, methods, tools and components; all leading to the aims and goals of training that is optimal for contests and competitions and achieve the best possible performance.

"Principles of sports training are theses or general rules, which directs all sports training activity" (O. Bompa, 2001).

The means of sports training are practical tools that work and prepare athletes performance to obtain skills, sports performance or capacity,

addressing at the same time to propelling spheres, physical and mental.

The resources of sports training can be classified in class means or means of training, recovery means and means of competition, starting from the main forms of organization.

At this stage AS means have diversified and became more complex, because of thinking (creating new combinations) and by introducing new knowledge from other fields.

We are witnessing the emergence of new fields of sport, yet the creation of technical combinations increasingly difficult sports like gymnastics, figure skating, etc., the improvement of sports materials, facilities, research equipment, etc..

It was reached to the new forms of recovery developed by doctors and psychologists to ensure the possibility of the organism to make high efforts.

Thus the conditional abilities (strength, speed, resistance), a neuro-muscular energy infrastructure is created that enables support for specific efforts of the volume and intensity of effort, that act in parallel or in combination over the processes that the performance depends on.

On coordinative capacity, improving analyzers need to recognize as quickly as optimal muscle tension adjusting degrees of freedom of movement, maintaining balance, spatial orientation and developing the most of skills, enabling them to use skills and propelling skills in specific technical and finally, obtain superior results.

Methods are "chained logical operations structure established to achieve a goal or an aim" (A. Dragnea, 1996).

It notes that sport training uses many methods, some common to those in physical education.

This fellowship does not require an application like methods, but their inclusion in training classes with superior characteristics and in different organizational conditions.

The essential feature of training methods is given by the ratio of energy consumption and fatigue accumulation, on the one hand, and the rest needed restoration, on the other hand, in other words, the game of rest and exercise.

Methods are multifunctional and can lead to achieve different aims regarding the development of physical, motor skills development, improvement of exercise capacity and improvement of training some skills.

"Methodical procedure is defined as private way, for the implementation of a method" (O. Bompa, 2001).

The choice of methods is based on training objectives to be achieved, most notably performance capacity.

The classification of methods in sports training is conducted in two broad categories: methods that rely on stress-rest relationship and methods that



rely on part-whole relationship or providing training competition and gives us an insight into the effectiveness of training.

The content athletic training "designs those elements of structure based on functional and methodological laws and rules, determines achieve sports performance" (A. Dragnea, 1996).

Sports training content has become increasingly complex due to the evolution from sports performance to specify the design and methodology of work.

Advances that were made, it appeared the need of systematization of the training content according to certain well-defined rules, the basic rule is one that relates to the purpose and / or exercise effects that these have on different aspects of training athletes.

Sides which addresses these exercises are: physical, technical, tactical, mental, theoretical, artistic, biological, sides considered as components of athletic training.

Physical training is sports training component that has a special role in the entire training process, leading ultimately yield athletes in training and competitions.

It is the linchpin for all other components, the foundation for the entire training process and provides a high functional capacity of the body.

Due to its complexity, physical training ensures a high level of development of basic and specific motor qualities, optimal values of morpho-functional indices, a full possession in the exercises used and perfect health.

Physical preparation is important at all levels of training, being different from one sport to another branch in relation with their specific requests.

Thus to the beginner groups has a high share of time and means used, the valuable athletes give preparation time and smaller physical space, due to cumulative effects to their training over several years.

Due to various forms under which meets, physical training had to be systematized in general or comprehensive physical training and specific physical training.

General physical training provides basic motor skills development, functional capacity of the body in general motor skills enrichment general fund, the harmonious development of morpho-functional indices which determine the branch of sport practice, positive transfer of training specific to the sports industry.

Specific physical training is oriented mainly to the development effort capacity of an industry specific sports development priority and different qualities combined motor involved, ultimately leading to specific performance in some sports in which performance is strictly determined by the development of an increased motor quality and "specific gravity" of specific physical preparation, sports with increasing skill.

Specific physical training is done by means of specialized strictly determined by the particular branch of sport, muscles involved, the type of request, etc.

In the micro-cycle training, specific physical training has a bigger role from the second third of the preparatory period and throughout precompetitive stage.

Between the two types of physical training there is a close relationship, both athletes conditioning efficiency.

Technical training - a technique includes all branches of sport motor actions ideal executed in terms of their effectiveness. It involves making a rational and economical type of movement, specific branches of sport, established under their respective regulations in order to obtain higher efficiency in competitive activity.

The technique is important primarily by movement economy and efficiency, it is largely conditioned by the other components of athletic training, physical training in particular.

In preparation for beginners is a basic rule, namely, to ensure the necessary physical properties availability first technique, which involves a large number of repetitions.

Underdevelopment at the appropriate level of exercise capacity leads to a technical malfunction.

The technical training is not just a priority in all branches of sport.

In sports of precision and expression such as figure skating, artistic gymnastics, technical training must be very demanding, technical accuracy in establishing the primacy of competition.

The jog speed technique should facilitate in obtaining the maximum output.

In sports games and fighting sports, technology influences the priority of solving complex situations or fighting game.

The level of technical training of an athlete depends on the baseline and its motor experience.

Acquiring a piece of abilities and skills to move out an upper request of the sensory system, this fosters learning movements.

Technical components under the technique analysis and technical training so we can define:

Technical element that represents a fundamental motor structure underlying for practicing a sport branch, care to volleyball, handball throwing, are motor fundamental structures, which together with other industries that underlies to practice those branches.

The technique procedure is how to perform particular technical element, such as throwing at the gate by avoiding the handball, basket throwing through jumping, etc.

It is the result of factors such as: creation by coaches and athletes of new models of effective processes, taking account of morpho-functional



features and mental athletes, sports material quality, etc.

The style is personal imprint or how to perform a particular technique.

Although the basic mechanism of that process is followed, the morpho-functional and mental features still sink on execution, this implies a value of the athlete.

The basic mechanism of the technical process consists of a logical sequence of motor acts necessary to carry out effective ways: enthusiasm, fighting, flight, landing in long jump in athletics, etc.

It should be understood as a propelling act / acts / represented by space-temporal aspects (distance, position, direction, duration, rhythm), dynamic-energy aspects (strength, speed, precision, coordination, balance).

Procedures and research methods

The research hypothesis is the idea that if a rigorous physical training and technical and

Results

Table 1. Tactical actions before using individualization principle

N° game	Throws at 9m	Throws at 6m	Outrunnings	Crossings	Blockings	Circulation
1	19	21	15	8	16	4
2	22	23	19	16	18	7
Max	25	25	25	25	25	25

Table 2. Tactical actions after using individualization principle

N° game	Throws at 9m	Throws at 6m	Outrunnings	Crossings	Blockings	Circulation	Media percents
1	76%	84%	60%	32%	64%	16%	55.33%
2	88%	92%	76%	64%	72%	28%	70%

We notice that, at the first game without a special physical and technical training, the total share of a individual and collective tactical actions, was 55,33%, and in the second game the total share of individual and collective tactic actions was 70% , a progress being of 14,67% .

scientifically made, may increase the efficiency of individual and collective tactical in an official game.

The study tour took place in the Junior National Championship I, 2011-2012, the junior team of the Sports High School I Braila.

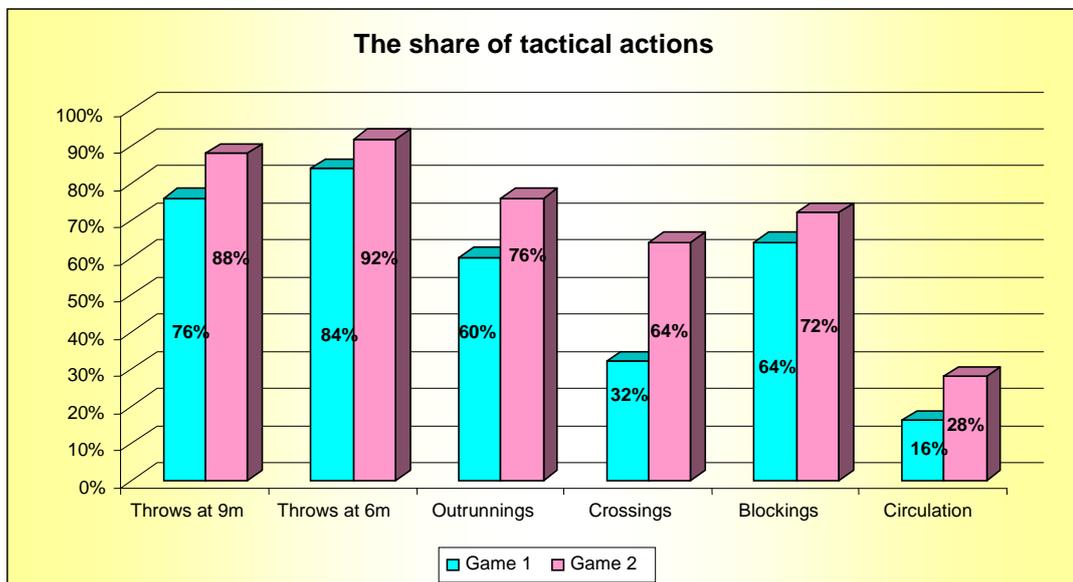
At this level the emphasis was on improving specific physical training and game improvement technology.

The methods used were, documentation, observation, practice, the method of filling in the observation sheets, statistical and mathematical method for interpretation of results and graphical method.

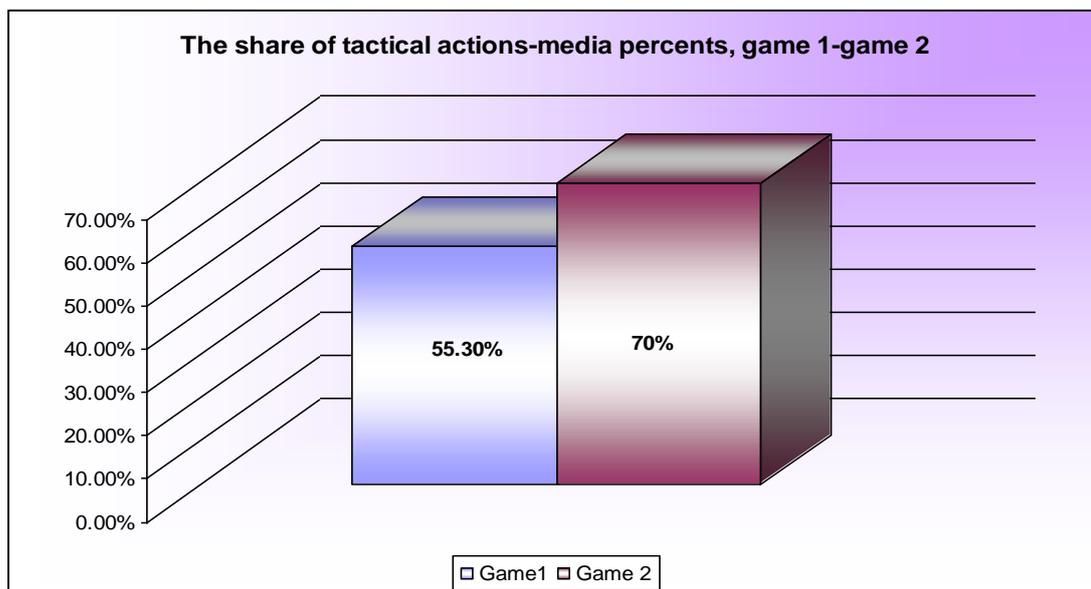
The evaluation took place over two official games, the first and last of the tour, noting in the observation chart the individual and collective tactical number of actions, previously established as the most representative.

Numbers of actions have been reported in an optimum number, and reported during the game, which is for 25 shares.

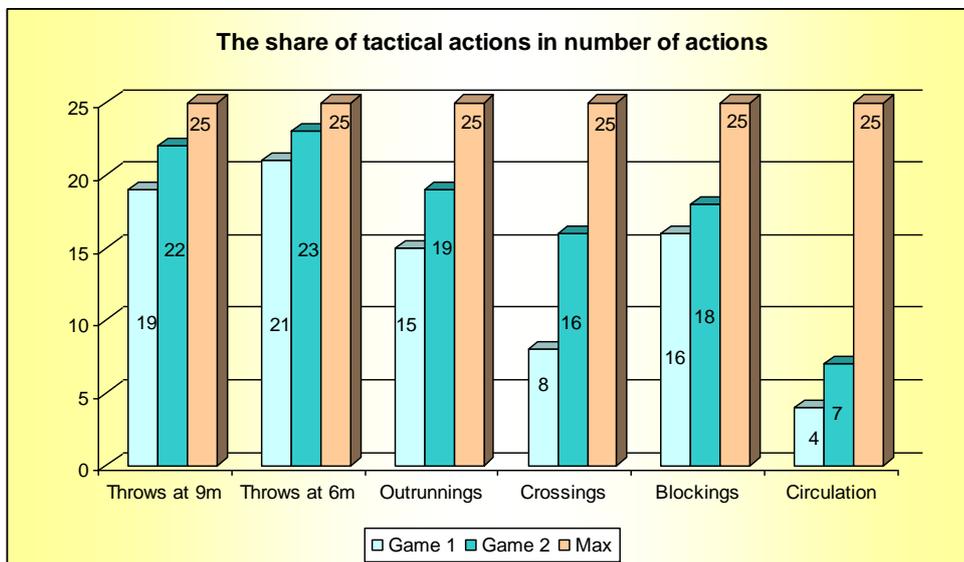
Graphic 1



Graphic 2



Graphic 3



Conclusions

After studying and interpreting the results recorded in case report forms, we see that from practical approach made tactical actions and collective share, visibly increased from first to last official game, so the hypothesis has been verified and attained.

One can say that tactical training can not be effective without rigorous physical training and technique performed.

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