

COORDINATION - AMBIDEXTROUS - IN SPORTS GAMES

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Abstract: Sports games have multiple meanings formative and educative. By content, form and effect, they show great advantages for learning, training and strengthening the habits and skills of basic motor, utility-applied and specific, as for the development of motor skills: conditional and coordination, processes and mental traits personality. Technique of a sports game is the driving movements executed by a player during practice and game respecting the rules. The technique involves defining the rational and economical movements of a particular type of specific sports game, made in order to obtain maximum efficiency in the difficult conditions of the game. The technique has its support as the main mode of manifesting superior driving ability. The level of technical training of a player depends largely on the initial conditional and coordination development capabilities and experience of its motor. Coordination capabilities are required for mastery of situations that require quick and rational action, it is important in the relationship game. Ambidextrous most commonly occurs as a result of education clumsy hand (any awkwardness that due to social factors have become right-handed). We know all that until recently awkwardly school students were forced to write with his right hand.

There are sports that involve a strong lateralization (throws, jumps) and others that require symmetrical movements, ambidextrous such as swimming, skiing, and running.

Keywords: coordination, ambidextrous, learning technique games

Introduction

Childhood is the age of growth and development, maturation and progressive fulfillment of personality. The largest increase capacity in children ante driving puberty occurs at age 5. Motor stimulant that age has an important role to improve the physical development of children. The correct dosage of effort must take into account the capacity of the child at this age, closely related to the degree of morphological development of the organism.

Cortical Plasticity in particular, facilitates the work of physical education teacher, who guides children in learning specific skills sports.

During this period, growth and development of morpho-functional schoolchildren are much faster and generally more uniform than up to that age.

At the age of 6-7 ends the differentiation of cortical neurons and peripheral and efferent and afferent fibers nucleizarea all.

„The brain weighs approximately equal to that for adults, but from a functional perspective, its development is complete. There is a better development of the first signaling system; complex motor cortical area is only at 13-17 years” [1].

Phylogenetic older segments of the somatic nervous system (spinal cord, bulb, bridge, midbrain, paleostriatul etc.) mature faster than new ones (neostriatul and neopallium).

From a functional perspective most striking is the lack of balance between fundamental cortical processes, pointing out a clear predominance of excitation. Of the various forms of inhibition, particularly inhibition of differentiation (one of the main forms of internal inhibition, conditioned) is underdeveloped. Predominance of cortical excitation is largely responsible for exaggerated cheerfulness, eternal restlessness, irritability, restlessness permanent pupil ante pubertal age. Poor development of inhibition (internal) determines conditional relative instability of concentration and difficulty maintaining attention longer.

Special plasticity of the central nervous system at this age is one of the biggest advantages that confers younger generation functional receptivity increased compared to adults including the driveability.

This plasticity increased brain early age children ensure receiving a relatively large number of information from the external environment and form directed the education process child may acquire a large amount of concepts and knowledge of the various fields of different sciences. Increased responsiveness and ability to initiate children by themselves do not ensure the acquisition of motor skills, but only through a systematic repetition. This difficulty results from the weak development of inhibition of differentiation mentioned earlier, that does not help, but rather hinders

cortical fixation element again received. Sabău et al. *study shows in early age, the expression of the lateralization dominant, through gestures and motor acts, is not complete. The motor tasks that require ambidexterity expressed simultaneousness indicate similar manifestations in boys and girls at early age* [2].

Special plasticity of the central nervous system and motor skills default, they put a special mark on the handling side and feet side.

„Functional dominance over another part of the body, especially the hands, resulting in preferential use of it. So there are right-handed and left-handed. [3]. Delimited, the term refers to skills, manual dexterity. *„There is a disguised one of the dominant right hands in activities that are carried out symmetrically with both hands. It is considered that the right hand is skillful, while the left hand is stronger”*[3].

Laterality occurrence in older children a year, is dependent on a progressive brain hemispheres dominance over the other.

This dominance is expressed as:

- establishing a dominant guidelines to specific excitation sources;
- simultaneous inhibition correlated to other centers.

So dominance can translate by creating a hotbed of excitement, which can occur in different areas, while inhibition from other pathogens. The principle of dominance occurs on all floors central nervous system.

The working relationship indicates the predominance of one of the two cerebral hemispheres is called cerebral hemispheric dominance. It is usually dominant left hemisphere which is expressed in the right half of the body but can be dominant right hemisphere. Dominance translates into a more high-temporal organization of area parietooccipito hemisphere that as a result of management actions gnostic-praxico-phase finer and more accurate.

In everyday life we are accustomed to find that man uses symmetric elements of the body in the same way or with the same frequency.

All human motility, roughly, is asymmetrical: speech centers and motor centers are situated to the left. This asymmetry induces nervous, but apparently a motor asymmetry: most people are right-handed. Laterality is an expression of development asymmetric key feature of the processes

involved in developing and growing tendency towards harmonization of organized inter psychophysiological correlate different structures and functions.

Asymmetry is the most educated. Child seems to be „symmetrical” at least in terms of the upper limbs: he grabbed with both hands. Over time, these movements are inhibited and coordinated driving under the influence of images created by imitating gestures and adult education directed permanent motor: eat and write with his right hand, left hand does not give etc. So we can say that at this age we can act with real results in education ambidexterity of children.

Hand laterality, sometimes called „skill”, reveals stronger especially when running complex and expressive movements like shooting the basketball, the shot on goal handball, volleyball to accommodate the service and throwing with the same hand in track and field.

In the work carried out with both hands, ruling that bears more complex work, doing other work on coordination of completion. *„The left hand generally carried out preparatory action, while the right hand complement the activities”* [3]. For example, in archery athlete stretches rope with his right hand to launch the arrow, the right-hander takes pole vault pole with the right hand.

Grodin (1997) quoted by Criotoru presents *„ice hockey by as interesting as the way of keeping the object (right or left on the butt end) depends on laterality, printing outlet and a certain style of play: based those who hold the power to stick with your dominant hand or finesse the puck leadership to others”* [3].

A good coordination is a prerequisite execution as faithful as possible to the model (program) motor fixed, it depends in turn on the accuracy of information from analyzers, whose integrity and level of training plays a decisive role here.

In coordination processes, some sectors of the action come are automatic, not subject to constant scrutiny of consciousness. This action only in the event of unforeseen changes, programmed sequence.

Coordination abilities differ from motor skills: *„while motor skills are acts motive concrete reinforced, partially automated capabilities of the coordinative represent conditions strengthened generality, that fundamental*

human performance in relation to a series of acts gesture"[4].

From specialty materials, distinguish the general and special coordinative abilities. General coordination abilities arise, as a result of various actions polyvalent training gestural driving or sports. They manifest in different areas of everyday activity, but also in sports because gestural some problems can be solved creatively. Special coordinative capabilities grow more within sports being specialized skills.

Coordination capacity can be regarded as psychomotor which is based on the correlation between the central nervous system and skeletal muscles while performing an act or motor action.

Coordinative skills development *are particularly effective in increasing difficulties execution, as disturbing (strengthening or weakening) the information provided by analyzers*. Harre quoted by Manno, *proposes a whole range of means*"[5].

- Execution variation movement or engaging each partial phases of a driving sequence (technical sports, motor skill base) or running partially on each of them or modifying the pace.

- Changes in external conditions - it is about changing data and dimensions of the environment or installations: the height of a grid or a gate diameter ball sports games, ways of a way, etc.

- The combination of skills (technical) already automated. Acquired motor skills are executed simultaneously or chained form, that implies that they are perfectly mastered (phase coordination fine), otherwise error may occur intermittently or exercise and is impossible.

- Practicing with time control. Exercises known are executed at a rate as fast as possible or succeed the minimum and maximum ranges. Times are timed and communicated to the athlete.

- Variation information. Information received from sports can be enhanced or simplified either by changing the environment or making use of simple devices. An amplification of this information using video carriers, accelerometers platforms ergometer etc. increases the capacity of the athlete's control.

- Exercises performed on the substance of fatigue. Exercise used for it, must be mastered in order to avoid unpleasant consequences due to poor execution.

Establishing a finality requires immediate and prepare a program selection engine. This program should be developed as closely in relation to the proposed model, which corresponds to what the player has already repeated on several occasions to acquire a precise motive images and a sequence of movements corresponding to concrete implementation.

A too weak line between program and achieving its deficiencies may be due to the conditional nature (eg insufficient strength in the initial phase of technical execution or lack of resistance).

Motor memory, which records the movement program performed his transformations that occur through specific exercises similar fragments already registered movement is essential to learning.

Coordinative capacity building training process is oriented in two directions:

- development of overall coordination;

- development „skill” sport specific branches.

The training lessons envisages the following methodological guidance for the development and coordination abilities:

- training emphasis will be placed on mastering a large number of specific motor skills play sports;

- exercises must show a high degree of difficulty; as the player gets used to the exercise, will increase its difficulty increasing requirements for precision movement, full coordination of the movement and its components and spontaneity change the situation;

- providing pauses long enough to allow full recovery of exercise capacity;

- workload in a lesson must be low, instead will schedule a large number of training lessons with objectives of development of the various components of skill;

- the most favorable periods for skill development are childhood, puberty and adolescence, when the body has a greater plasticity than adults.

Ambidextrous human is the ability to use the same skill with the same ease both hands in everyday life.

Ambidextrous most commonly occurs as a result of educating our skillful hand (any awkwardness that due to social factors have become right-handed). We know all that until recently awkwardly school students were

forced to write with his right hand which hinder the development of ambidexterity.

There are sports that involve a strong lateralization (throws, jumps) and others that require symmetrical movements, ambidextrous such as swimming, skiing, running. Sports games are between these two categories. It is worth mentioning here that the regulation requires the use of rhythmic gymnastics official nondominant hand (fumble) in a proportion of 20 percent of all evidence submitted in the course of the contest.

In basketball, for example, it is looking for left-handers for the effectiveness of their action against right-handed but must not forget that most times the conditions of ambience (the playing field with the right and left), passes that can be sent and received either right or left, collective technical and tactical actions that can take place depending on the game situation (blockage to the player with the ball can be made on both sides) - all these are arguments for ambidextrous in sports. Therefore in sports training is needed to ensure functional symmetry.

Conclusions and discussion

Learning the art in games sportive depends on the level of development of capabilities of the coordinative and driving (coordination, ambidextrous, laterality).

Left-handed assault athletes in sport is increasingly higher. The subjects that excel are those of left-handers and individual direct confrontation, where opponents uncomfortable. Laterality unusual awkwardness sometimes becomes a determining factor in achieving success by targeting their unexpected offensive actions in sports games.

„In *basketball* the players choose to make a pass or shot with the weaker hand”[6].

According to Alparslan et al.’s results of a research, „combining strength workouts with tennis technique and coordination training develops strength as much as hand-eye coordination within the children that are 6 years old and do regular tennis exercises” [7].

Mosoi’s research shows „that athletes who feature left hand laterality or are ambidextrous have a higher level of neuromuscular control than athletes who distinguish themselves than right laterality” [8].

According to Badau’s study „females have a superior general coordination than the males. This statement adds up to the results of other studies according to which women have a better orientation in space as compared to men, as well as a better perception and space visualization” [9].

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