PSYCHOMOTORICITY, COMPLEX FUNCTION
IN BASKETBALL REFEREES’ TRAINING

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Abstract: In the specialized literature, there always appears the idea of the relationship between the biological, physical and motric development and mental and psychic development in general. Thus, there is the general opinion that the act of movement, its quality, is closely linked to consciousness, that when producing movement there is an interdependence between biological and psychic factors, that the motor structure is in a relation of interconnection, interaction and consubstantiality with all structures of the human psyche, including the intellect, that the various neurodynamic disorders of the cortex adversely affects the quality of the cortical analysis function of sensorial stimulation, thus the quality of the response motor act and the motor limitation negatively affect the psychic organization, resulting in less information which, in turn, has negative implications on the general intellectual development.

Key words: psychomotricity, refereeing, development, training

1. Introduction

At the beginning of the twentieth century Professor Ernest Dupre introduced the concept of psychomotricity to highlight the close relation between motor acquisitions and psychic development.

Studying movement made by man has always preoccupied philosophers, doctors and psychologists, finding very long ago the connections between motor and intellectual development. (Stănescu, Monica, 2002). It has been insisted on this relationship in modern psychology as well. Its prominent representatives stress in their work on the links between mental and physical development, on the relationship between the motor and nerve maturation, on the relationship between intelligence and motor activity.

The motor reactions of the people are, like any other psychological manifestations, elaborate answers to certain stimuli (Epuran M., Hoghidan V., 1997).

Genetic psychology studies have a special role in substantiating the concept of psychomotricity through highlighting the role of non-verbal (body)
activities in the development of cognitive functions (Dragnea A. Bota A., 1999). Movement influences human behaviour, his temper, setting psychomotor impairment syndromes also leading to abnormal behaviour. According to Piaget, the basic structure of thought is given by the internalization and coordination of motor actions, motor dynamics being the starting point in the development of intelligence.

2. **Psychological bases in the training of basketball referees**

Psychomotricity field is vast, since it can be said that any movement is psychomotor from the moment it exceeded the reflex act. This is because any movement is supported by motivation, desire and competence.

The term of psychomotricity encompasses three distinct meanings, namely:

- A means;
- An occupation;
- Certain stimuli.

Psychomotor education’s technique aims to develop motor activity of the human being, given the close relationship with all the psychological factors.

The psychometrician uses these techniques based on needs: for education, re-education, and rehabilitation.

Psychomotor stimulations are not represented only by specific game activities, but they are all the interactions between adult and child.

Specialists who have approached the psychomotricity issue unanimously agree that its understanding is conditional on addressing human being as unity of two aspects: mental and motor. Therefore, the importance that organization and coordination of movements is highlighted, neuropsychic development, perceptual-motor development, the maturity of the nervous system and the degree of physical development, intellectual development have, as well as the regulatory role of the word in taking motor action. (Paunescu C., I. Musu, 1997)
Expression of the entire system of personality, psychomotricity is the result of integrating the interaction of education and maturation of synergy and conjugation of motor and mental functions, not only in terms of movements and observable movement acts, but also what leads them and accompanies them - will, affectivity, needs, impulses (Laflon R., 1963, quoted by Dragu A., 2003)

Horghidan claims that the specificity of psychomotricity is the result of two aspects:

- The degree in which it is involved in adjusting the activity. It is considered that psychomotricity occurs in the moment of intent to make a certain movement, and that is why this person should know his own possibilities of movement, to make an idea on the space he will make the movement in, etc. (Horghidan, Valentina, 2000)

- Specific structure of elements. Although some experts consider that psychomotricity is a redundancy, precisely because motricity cannot be conceived outside the voluntary control, certain distinctions are however necessary. Psychomotricity is a conjugation of the psyche and motricity, but their intersection is only partial, being illustrated by ideomotor representations, body scheme, manual and podal laterality, motor intelligence, energy balance.

Psychomotricity appears both as skill and as a complex function of regulating individual behaviour. It includes the participation of various mental processes and functions that ensure both proper reception of information and execution of the response.

Piaget and Wallon quoted by Dragnea A. and A. Bota argue that the psyche and motricity are two distinct categories, one subjected to thought and the other to physical and physiological mechanisms, but rather they are the expression of a single bipolar process, that of efficient, adaptation, flexible to external conditions. (Dragnea A. Bota A., 1999)

Dragu states that a distinction must be made between sports motor skills and psychomotricity. The field of the former includes classical capabilities on strength, endurance, etc., and the field of the second, perceptual-motor abilities, reaction time to a simple stimulus, motor gesture adaptation to the trajectory of an object, etc. (A. Dragu 2003). Quick reactions in sports do not depend so much on involuntary reflexes to innate stimuli, but especially on the rapid reactions and movements that are learned responses, voluntary to stimuli.

In conclusion, we can say that psychomotricity is a complex function that integrates and combines motor and mental aspects related to perceptual, sensory, intellectual and motor functions to the reception of information and proper execution of the act of response. Epuran believes that education of psychomotricity should address the following issues:

- motric skills development (speed, strength, endurance, flexibility);
- muscle sense development (complex motion perception);
developing basic motor skills and abilities:
- developing work capacities of the body and adaptation to motion capacity (control of the body, control of the environment). (Epuran, M., 1976)
  
- The main directions of manifestation of psychomotricity are:
  - the relationship with itself – it includes in particular postural coordination based on reflexes, with its spatial components (body axis and the correct alignment of the skeleton), rhythmic components (rhythmicity of breathing) and energetic components (concentrating strength in the abdomen);
- the relationship with others – this is achieved by skin contact (for example, mother-child relationship that will allow further on the appreciation of the bodily ego - gestures, smile, voice, look;
- the relationship with the environment – manipulating objects around us, discovering near and distant space etc.
  
- In a general sense, psychomotricity elements are the following:
  - **body schema**: the image that individual has about his own body: total and segmental image, static and dynamic, in the relation of body parts between them and in the relation of the body with the space and objects;
  - **dynamic coordination** of the body as a whole and its segments;
- **laterality** is related to the dominant function of a cerebral hemisphere; the sensory and motor asymmetry phenomenon is innate and is based on a particular functional organization of cerebral functions;
  - **static coordination, balance**;
  - **perceptual-motor coordination**: perception of space, rhythm and movements;
  - **movements’ speed**: speed of reaction, execution, reception;
  - **ideomotricity**: dynamic synthesis of the body scheme and perceptual-motoric coordination with the motor charge.(Epuran M., Horghidan Valentina, 1997)
  
- Through the basic components of psychomotricity (body scheme, laterality, ideomotricity) the following become possible:
  
- pragmatic adaptation (learning the professional, manual or intellectual techniques);
- social adaptation (ways of interpersonal communication)
- aesthetic adaptation (corporal expression techniques);
- educational adaptation (physical education, sports training etc.).(Dragnea, A., Bota, A., 1999)

3. **Mental development factors of basketball referees**

Psychomotricity plays an important role in the game of basketball from initiation until reaching great performance.
So, by extrapolation, it is an important factor in preparation of basketball referee who is subordinated to the game. An example of this is given by Marcus, who says it is difficult to learn defensive positioning between the opponent and the basket and respecting the optimum distance towards the opponent depending on his positioning on the court. (Marcus, Hazel, Rose, 1991)

In order for a referee to have an exceptional performance he should arbitrate the defence, because this is what gives him the opportunity to observe best who, in this case, makes the contact or is guilty of it. His position on the ground imitates a lot the fundamental positions of the basketball players in defence; the referee’s movements are running, lateral movement, which we find in the players’ movements in the court.

Mental training, a concept with profound meanings, has become one of the factors of the workout which is so much discussed and open for improvement and enhancement in sports competition (Epuran, M. Şerban, M., 1993).

The training of referees is a pedagogical process, extremely complex, comprising both the instructive side and the training and education of referees. The purpose of training is to provide increased working capacity of the organism and to ensure preparedness and multilateral development of the referee, both physically and mentally, to make him apt to participate to the maximum level in sport competitions and, at the same time, to form personality traits for him.

Modern psychology assumes that psychological development is a very complex process that is performed in the organism-environment unity, as a consequence of external active conditions (environment, education) through internal conditions (heredity), education turning into a leading factor in relation to the others, considering and materializing their specific contribution (Dragu, A. Cristea, A., 2003).

Organism-environment relationship in humans is very complex and has its own characteristics from other animals, being basically expressed by the human-society relation. Social environment, as a factor of development is in constant dynamics, certain social relationships developing inside of it, certain moral rules, a certain structure of the family, etc.

In the medium and through the medium, some level of requirements are expressed and at the same time, a certain level of needs as products of human existence in society. The most significant influence on mental development is done through a system of social requirements which is manifested for the individual under development, requesting of him an effort to adapt.

Education is a component of the social environment but it opposes the random environmental influences by the conscious, systematic, planned and exercised nature of formative influences in an institutionalized framework, through well-trained personnel in this regard.
Education is the most important lever in organizing the multilateral specificity of personality, it is a process that, having an active character, causes a self-motion in which new relationships are always created between external forces and influences and size of internal forces and requirements, between the demands of society towards the individual and his possibilities and requirements to the society in which he grows.

Sports life of every individual may begin as early as elementary school age and can enter adulthood. He remains however the athlete to be changed, ready regardless of age and the experience he has.

Competition is the main feature of the sport. The referee is training to get good performance in terms of competitions. Each sport has its own specific mental preparation for competition, which need to be made early by a referee. Learning the general attitudes and behaviours is the prerequisite for the preparation of a specific competition.

Talking about the mental capacities of the referee, we cannot overlook the fact that he has as primary task to perform a competitive game between two teams. The decision-making activity in this case cannot be perfect, wrong decisions are not an exception.

To present an overview of his decision-making ability, we can go over some of the requirements of the referee’s activity. They result from a thorough study of Anshel (1995):

- Knowing the rules,
- Verbal communication on the field,
- Non-verbal communication on the field,
- Equipment,
- Communication outside the field,
- Fitness level,
- Presence on the field,
- Active contribution on the field,
- Improving own behaviour,
- Use of critical feedback,
- Interaction with partners
- Maintaining credibility
- Conducting mental and physical preparation before the game. (Priebst, Maria., 2007)

Thus, observing these requirements, we can say that referees, in order to conduct a proper game, are not only supposed to know the rules of basketball, but they also must have certain mental and physical requirements that would determine their activity.

Increasingly more, we find in the conversations of specialists the link between the physical and psychological factors in the referee’s work. His
performance has great stability, mentally speaking, since the factors of mental
are those who put great pressure on the referee's performance.

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