

Motor Learning in the Physical Education and Sport Vision

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Abstract

Motor learning is a very important process in the instructive-educational process of the physical education and sport, with its help the main specific objectives of this activity being made. This subject is treated both from the point of view of the learning problem as a process aspect but also from the point of view of the perceptive-motor (sensors-motor) and motor learning, between the two ones being difficult to make a concrete difference, the importance of the perceptive-motor (sensors-motor) and motor learning being given by the significant volume of motor skills that are at the base of the physical education and sport.

Key words: *learning, motor, physical education, sport*

Introduction

The problem of motor learning is a present subject being known the fact that this is a part of the learning process, fact that is at the base of the acquisition of different behaviors, knowledge, verbal actions etc. Scholar learning is defined by M. Ionescu, I. Radu (2004) as a “process of amnesic acquisition, active assimilation of information, forming intellectual operations, motor skills and attitudes” [6, p. 48]. We can notice from the definition presented above that the mentioned author defines the scholar learning process depending on the content, through its product – attitudes, information, motor skills, intellectual operations etc.

I consider that dealing with this problem is necessary due to the evolution of this concept from the vision of the pedagogy and psychology. The motor-perceptive learning (sensors-motor) and motor has an important role in the physical education and sport activity due to the significant volume of motor skills that are at its base.

Theoretical-conceptual clarifications

From the study of the specialty literature we can say that learning is a psycho-behavior process of improvement of the individual adaptation at different situations that appear in the subject's life. In general, learning is considered as a domain governed by statistic legalities.

Defining learning is made, usually, through two directions: pedagogical and psychological. From a psychological point of view learning is understood as a “acquisition process of certain

new behavior forms, as a consequence to the repetition of certain situations, having as object in special the legalities and learning mechanisms” [3, p. 124].

The actual repertory of educational concepts has allowed finalizing a very important theoretic base in what concerns the treated problem. During the learning process a very important role is held by the word both through its adjusting function and the signal one.

M. Epuran, I. Holdevici (1993) considered that learning can be understood as:

- process, this concept has at its base the mechanisms that condition the learning process, manifested in terms of reorganization, assimilation, strengthening, modification etc.
- result, when we are referring to the abilities, skills, knowledge, behaviors, attitudes, performance.
- operational action that can be lead individually or collectively, independently or pedagogically, referring to the situations in which the training, auto-training, teaching, checking, practicing, examination etc. take place [3, p.124].

Also, we must mention that, learning cannot be confused with a simple process of storage, memory and updating of the transmitted information by a didactic staff, this process being a lot more complex.

We can encounter pretty often (at the teaching staff) the confusion between learning and different amnesic functions among which we remind: knowledge reproduction, recognition etc. an important role for learning is held by memory, attention, perception and thinking.

The experience that an individual gains becomes a personal good of his own, an important role being held by the instructive-educational process, based on the communication activity of the knowledge by the teaching staff and not only.

M. Ionescu, I. Radu (2004) considers the scholar learning action, through two aspects, and that is: the motivational aspect (the hiring or implication level of the pupil in the learning act – the pupil-task relation) and the process aspect of the learning (contains the processes that make a learning sequence – observation, memory, thinking etc.) [6, p. 48].

The learning characteristics at every individual are determined also by the fact that this is developed in society, the experience that he acquires has to be in harmony with the social environment in which he lives.

During the instructive-educational process, learning must be understood both through the intellectual activity and through the practical one.

The conscious and intentional character offers to the learning process the “rationality, organization, systematization and integration attributes. Due to these characteristics, learning is not a simple acquisition of answers in standard situations but a progressive adaptation to the behavior forms at situations more and more complicated, on the basis of the developing of certain essential characteristics of the human being: creativity, selectivity, independence, decisional capacity “ [3, p.126].

Montpellier (quoted by M. Epuran, 1993) classifies learning after it follows [3, p. 126-127]:

- the condition process – the one that has at its base conditional reflexes (the formation of certain reactions through association with different stimuli).
- perceptive learning – is characterizes by the modifications of the perceptive reactions (reducing the sensibility level, detail perception, recognizing or identifying structures in difficult conditions etc.).
- sensors-motor learning or perceptive-motor – characterized through the behavior modification depending on the new perceptive conditions (the increase of precision, fineness, preexistent answer coordination etc.).
- motor learning – is that kind of learning type in which the answer reactions in what concerns the sensor kinesthetic or pro-prioceptive components (skating etc).

- verbal learning – is that kind of learning that is based on learning the words significance and their use during the communication with those from around.
- intelligent learning – also called learning by discovery and is based on the discovery of a principle, new structures, a new concept etc. in variant conditions.

In what concerns the theories over which the motor learning in the specialty literature there are a series of theories, researches differentiating as following [11, p. 96]:

- reducing the experimental data and theories at the basic models, at types of educational processes and at methodological schemes.
- forming new models of behavior.

If we research in detail the theories and their diverse contributions, we can observe that, mainly, these are connected either to behavior positions (educated theories based on stimuli – answer models, $S \rightarrow R$), or the cybernetic positions (the study of general behavior of the individual through the focus of two essential aspects, that of the information and of tuning).

Activities specific to physical education and sports are classified specially in the type of motor learning or sensor-motor, thanks to the great volume of movement skills which are at the basis of this activity as well as the different acts of behavior met in daily life.

M. Ionescu, I. Radu (2004) pointed out the fact that, in a working operation there can be distinguished the following components: the motor component, the informational component, the tuning and control of the act and the intellectual component.

In general, almost all those acts are found at the basis of physical education (gymnastic movements, sporting games, etc.) are in essence sensor-motor acts, because these include clear connections between certain sensor data and the motor gesture.

M. Epuran (1993) pointed out the fact that, in motor learning “the exteroceptive elements, proprioceptive or rational are involved with different stakes based on the nature of the activity and actions that compose them. From this perspective it is hard to make a net difference between the perceive-motor learning and the motor one, the perceive element being present in some measure also in manifestation of some closed habits”[3, p. 132].

The learning process takes place in the intern cognitive field of the subject, learning by trial and error being fundament on different bases.

As long as different psychological factors can be of critic importance in realizing sporting performance of any level (scholar, professional, etc.), the evaluation of the psychological attributes must be made under the guidance of specialists, as well as in other fields, as certain ethical and procedural codes specific to the activity must be respected.

Likewise, the social factors are in direct link to the different psychological variables, having a special importance in the development of sporting talent in youth. The influences of the social environment on young athletes are very numerous existing variables considered essential, that must be recognized as significant in developing talent in these children.

M. Ionescu, I. Radu (2004) reminded that the skills are automated components of the activity, these indicating the rank of fixation of an action, remarking the psychological characteristic of the respective activity. Motor skills are characterized, in general, by the fact that there were first conscious acts, becoming later in variable proportion automated thanks to exercise.

We must remind the fact that, the student’s behavior that practices different activities specific to physical education and sports (these being corporal activities – of motor type), must be characterized by correctly executing the different motor acts, precision in movement, tactical thought, etc.

The learning specific to the aforementioned field engulfs, aside from the motor learning and perceive-motor learning, gesture and intelligent learning and the creating one. The meshing of

these result in the end, through exercise, in the increase in sporting ability as well as in the appearance of some automatisms in movement that have as a result the fulfilling of the proposed goals.

The forming of the motor skills represents an activity reflexively conditioned, based on the repetitions of the interaction between the different excitements (kinesthetic, visual, auditory) transmitted to the surface in the same order with the same intensity [7, p. 68]. The perfecting stages of the motor skills and abilities are: the familiarization with the motor act stage, the sequential learning or analytical stage, the organization and systematization stage, the automated stage and the perfecting stage.

The first stage is a cognitive one, being followed by that through which the learning by operations is realized. In the case of the appearing of a partial automated in the stage of perfecting the skills an important role has the third stage of its development, the organization and systematization of the parts or details of the specific action. The last two stages are characterized by the appearance of the automatism, of the stereotype and the elimination of the mistakes realizing the synthesis and integration of the operations in a whole operation.

S. Şerbănoiu [10] reminded the principal characteristics of the motor skills:

- They are part of the voluntary conduit that forms in the subconscious;
- In constant conditions they have a relative stability;
- Through their capacity of differencing they have an important role in the valuating of the sensor – perceptive information;
- They are conditioned by the motor talent, motivation, level of training etc;
- They are based on exercising the movements;
- They are characterized by inverse, fast and efficient etc. afferentation [10, p. 34].

This kind of complex learning (motor learning), which manifests through modifications of the behavior motor affiliated, has at its basis the happy combining of the motor schemes and the intellectual ones, the student acting concretely and correctly on his opponent or executing consciously his own moves, utilizing skills, knowledge, talents depending the exact situation in which it is manifesting.

Conclusions

In physical education, motor learning is determined by the complex character of the specific activity, learning in this field must not be reduced strictly to the learning on the basis of simple conditioning of the stimuli – reaction type ($S \rightarrow R$), motor learning needing to be completed by intelligent learning.

We must say that, in the instructive – educational process of physical education and sports, the learning must be understood through the lens of didactic activity, as well as through that of intellectual activity. Exercising is at the basis of all motor coordination, the deteriorating of these being for lack of specific solicitations.

Likewise, the sensor – perceptive control is very important in realizing the different motor acts and actions, the automated of these, on the basis of exercise, being influenced by the perceptive indicators be those internal or external.

A very important mean of optimizing performance is the perfecting of different movements until automated, this thing having as a consequence the more correct realization by the student of the operational strategies of solving the situations that occur during the physical education and sports class, by detaching from the concentration on strictly the movement of the members in a certain known way, the realization of different tactical, technical and other schemes.

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Învățarea motrică în viziunea educației fizice și sportive

Rezumat

Învățarea motrică este un proces foarte important în procesul instructiv-educativ de educație fizică și sport, cu ajutorul acesteia îndeplinindu-se principalele obiective specifice ale acestei activități. Acest subiect este tratat atât din punctul de vedere al problematicii învățării ca aspect procesual, dar și din punctul de vedere al învățării perceptiv-motrice (senzori-motrică) și motrice, între cele două fiind greu de făcut o diferență concretă, importanța învățării perceptiv-motrică (senzori-motrică) și motrice fiind dată de volumul însemnat de deprinderi motrice care stau la baza educației fizice și sportului.