

Values and Interferences of Psychomotricity in Education – a Study of the Domain-Specific Literature

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Abstract: The present paper presents the theoretical aspects related to the topic of psychomotricity and the way in which it is reflected in the domain-specific literature worldwide. The purpose of the study was to clarify the concepts, to identify specific classifications for the different application areas of psychomotricity, to generalize the components of psychomotricity and to identify evaluation methods for psychomotricity belonging to several domains. The study was carried out with the help of traditional means, in libraries and in the online environment. We accessed international databases that are acknowledged for the field of Sport Science and Physical Education in Romania. These databases are also acknowledged by other related research domains. 637 specialized bibliographic references were identified, out of which 584 online sources. In the present analysis we described the common aspects found in 50 bibliographic sources as well as definitions and concepts about psychomotor activity, stages of motor development and components of psychomotor activity and some psychomotor evaluation methods. The conclusion of the study is that the field of psychomotricity is very wide. The multidimensional approach of this subject is found in various fields of activity such as medicine, psychology, physiology, recreational or educational activities organized within a formal framework. Depending on the particular features of the psychomotor exercises, the educational values take multiple forms. The results in some domains interfere with those in other domains by the way in which the transfer between the motor and the cognitive components, between the physical and the psychological components is performed or vice versa.

Keywords: *values; interferences; psychomotricity; education;*

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Introduction

The study of motion and the relation between the motor and the psychological components was a problem of permanent interest of theoreticians from different fields, philosophers, doctors, psychologists. Humans are unanimously regarded as a combination of biological, psychological and physical traits, which allow the child, and later on the adult to live and be integrated into a dynamic, progressive social system (Cojanu, Vișan, Sun, & Langa, 2017).

The educational aspects of psychomotor activity rely on the opinion of theoreticians and researchers from different fields who consider that psychomotor activity must be viewed from a three-dimensional perspective, namely: educational, during the formation of preschool and school children; re-educational, when deficiencies or motor abnormalities are corrected etc.; therapeutic, when trying to treat psychomotor disorders that are accompanied by behavioural disorders. The three-dimensional perspective is found in a large number of scientific papers that support the importance of the psychomotor process quality on all three levels in order to ensure the achievement of the objectives (Calza & Contant, 1986; Coquerel et al., 2014; Maite et al., 2015).

Psychomotricity can be understood as a function of the human being that synthesizes the psychological and the motor components, which allow the individual to adapt in a flexible and harmonious way to the environment around him. Also, this can be understood as an overview that follows the interactions between the motor and the psychological components, on the one hand, and the individual as a whole in relation to the external environment, on the other.

Another view is that of a technique whose organisation of activities allows children to know better their own being and the environment around them and to act in an adaptive manner.

It is important to mention that the psychomotor intervention is not subject to a single model, but there are different methods and different methodological models.

The general objective of psychomotricity is to develop or replace the individual abilities by means of a body approach (through movements, posture, action and gestures).

In other words, the body develops different skills and abilities in all aspects (motor, emotional, social, communicative, linguistic, intellectual and cognitive).

The practice of psychomotor development has developed as a clinical implementation of psychomotor re-education and therapy. In the educational environment, the psychomotor development means stimulating the normal evolutionary process of the individual in the first months of life up to the age of 8.

Psychomotricity is a science that studies the motion of the human body in relation to its internal and external world, as well as its possibilities to perceive and act on itself and on the objects surrounding it. It is related to the process of growing up, during which the individual acquires cognitive, emotional and structural abilities. Psychomotricity, therefore, is a term used to designate a concept of motion, organized and integrated according to the experiences lived by the subject, experiences resulting from one's own individuality, language and way of interacting. The Brazilian Society for Psychomotricity (1999).

Since the subject approached is topical, many researchers have been concerned with delineating the main child development stages and how psychomotricity evolves from birth to the primary school age.

It is considered that psychomotor activity starts from the child's first years of life, due to his need to know the environment, by manipulating objects and through play.

Psychomotor development is unique for each child and is the result of the accumulated experiences, of the reactions and the answers given when different tasks are assigned to them. The child builds his own temperament and behaviour because each child has a certain pattern of growth, development and motor learning (Barbosa, 2012).

Psychomotor education is important because from a psychological and biological perspective it contributes to the integrated development of children. Physical training accelerates vital functions and improves mood.

In this context, of the multitude of educational components, of influences exerted in a bivalent manner on the individual, we chose to study the specialized literature on psychomotor activity. The clarification of the concepts, the identification of specific classifications for the different areas in which psychomotor activity is applied, the generalization of the psychomotor activity components and the identification of its evaluation forms, which belong to several domains, represented the purpose of this study. Another aim of the present research was to draw up a meta-analysis of psychomotricity by means of which to provide a unitary and succinct source of information that can create an overview of this problem. The present paper represents the equal contribution of its authors.

Method

The research was carried out within the Research Centre for Human Performance (RCHP) from “Dunărea de Jos” University of Galati (UDJG), in conjunction with South Ural State University, Chelyabinsk, Russia. The research of the specialized literature has been carried out both traditionally and in the online environment. The traditional study involved reading books and articles from specialized journals. This activity took place within the “V.A. Urechia Library”, the UDJG Library, the “AL. I. Cuza” Central University Library, Iasi. Accordingly, 53 specialized publications were accessed. The online environment research referred to accessing international databases. The accessed databases provided a number of 584 bibliographic references regarding the studied issue. These databases were: Web of Science (91), Scopus (198), ScienceDirect (155), Doaj (48), SpringerLink (92). The databases were selected because they belong to the category of databases acknowledged by the Romanian Ministry of Education for the field of Sport Science and Physical Education. Also, these databases are relevant for other fields, considered interdisciplinary, from the point of view of the subject addressed. The terms used in the online search were "psychomotor activity", "psychomotor activity in education", "psychomotor activity in medicine", "means of psychomotor activity", "therapy with the help of psychomotor activity", "psychomotor development", "psychomotor recovery", "psychomotricity in sports", "psychomotricity in persons with disabilities", "psychomotricity in physical education". The inclusion criteria for the search included books, articles or doctoral theses; sources in the field of general education; studies in the field of medical, psychological or sociological sciences; empirical or theoretical research. We also included sources of formal or informal education and there were no limitations regarding the years of publication. After identifying the sources, we sorted them and we established the content of the sources. This was done until the saturation point was reached, after which the studied sources no longer brought different informational elements, but they overlapped with the already found information. Thus, we selected the sources that provided theoretical information from various fields of activity, which would contribute to the achievement of the purpose of our study.

Definitions and concepts of psychomotricity

Semantically, psychomotricity is made up of two terms that indicate a relationship between the emotional and the motor elements and represents the study of motion with psychological connotations that go beyond pure

biomechanics, referring to the understanding of motion as an individual expression and development factor in relation to the environment.

Psychomotricity tries to encompass the progress and motor acquisitions that mark the evolution of a person and it represents a condition for the appearance of other processes (language, emotional relationships, writing, reading etc.). In this sense, psychomotricity is considered an area of knowledge that deals with the study and understanding of phenomena in relation to its movement and development. Psychomotor evolution is considered a key aspect in development until the onset of operational thinking (around the age of 7 years) and does not end until the development of formal thinking (around the age of 12).

Today's specialists seek to reconsider the previous theoretical aspects stating that the degree of psychomotor development has an important impact on the education of the child, with a greater emphasis on the full development of the child, especially of those with mental or physical deficiencies, the intervention on the psychomotor level being necessary in order to ensure the proper integration in and interaction with the group (Shingjergji, 2014), Esteban et al., 2019; Munian, 1997).

In the domain-specific literature the name of “psychomotor activity” is marked at the beginning of the 19th century by Dupre's medical discourse (1852), focusing on neurology, when he tried to define the areas of the cerebral cortex closest to the motor areas.

Psychomotricity is considered in the domain-specific literature as a complex function, an ability that integrates both the aspects of motor activity and the manifestations of perceptive functions. Psychomotricity provides the child with gestures, with awareness of his body, situates him in time and space, ensures the ability to manage his movements in order to interact with himself and with the environment (Preja 2014).

The connection between the mental and the motor components and their development as interdisciplinary sciences has been called psychomotor activity, which can be defined as the result of the integration of the motor component and the mental function, under the effect of the nervous system maturation, having as main objective the connection between the subject, his own body and the environment (Encyclopedia Universalis).

The main purpose of psychomotor education is not to restrict the knowledge process of the child regarding his view of life, his own body, not only as content, but rather by discovering each system individually, as a component part of an organized activity and a relationship tool with reality (Rossi, 2016).

Ahmad & Silva (2016) state that psychomotricity encompasses all the acts and motor actions performed by the individual, it is the interaction between the mental and the motion components, by means of which global development is sought, focused on the development of the emotional, cognitive and motor components, which guide the individual towards an awareness of one's body through movement.

Camargos & Maciel (2016) are adept at the idea according to which psychomotor education offers children the opportunity to outdo themselves and overcome many obstacles, thus integrating more easily in the social environment in which they are formed. The authors also advise teachers to refocus their methods on exploring the whole body of the child and to abandon the mechanical approach relying only on simple movements.

Other specialists, such as Martinez & Anton (2018), argue that the foundation of the human being's entire development is the motor aspect through which one can check whether the other functions are properly stimulated. Motion ensures learning and enables real goal and objective-oriented experiences, with the aim of improving self-knowledge and developing human skills.

The studies from the 2000s are still continuing at present and underline the importance of psychomotor skills in the learning process of children from a very young age (2 years old) to school age. Psychomotricity favours the acquisition of experiences necessary for the child in order to optimize the adaptive process to the conditions of a dynamic society, in full transformation (Borges & Rubio, 2013; Rabelo & Aquino, 2014; Bessa & Maciel, 2016).

Fernandes (2015), Fernandes et al. (2018), Martinez & Anton (2018) are also worth mentioning since they approve the therapeutic side of psychomotor activity as a recovery factor for some mental components, but also for the Down syndrome, based on specially created game programs and selected means of stimulating the cognitive part.

Piaget (1965; 2005) states that the mental and the motor components are the bipolar expression of a single process, that of efficient, flexible adaptation to external conditions. He is also the one who defines psychomotricity as a result of the mental and motor function integration under the effect of the nervous system maturation that concerns the relationship of the subject with his body. For Piaget (1965; 2005) motricity plays an essential role in building intelligence long before the act of speech.

PIAGET'S THEORY OF DEVELOPMENTAL CHANGE VIA SCHEMAS

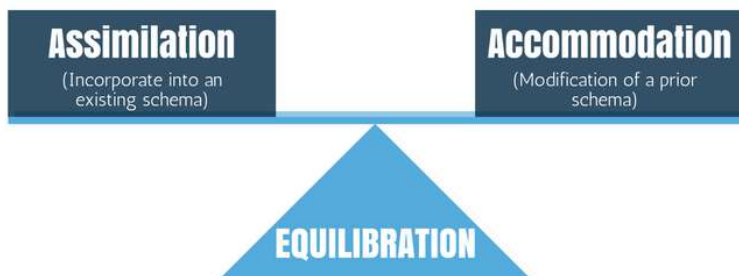


Fig 1. Piaget's cognitive development theory

Piaget (1965; 2005), considered the "father of psychomotricity" is known for the theory of cognitive development and the four stages of development:

- the sensory-motor stage, developed from birth to 2 years of age, when the child is concerned with gaining motor control and learning physical objects.
- the preoperational stage, between 2 and 7 years of age, when the child is concerned with the verbal qualification
 - the concrete operational stage, between 7 and 12 years of age, when the child begins to deal with abstract concepts, such as numbers and relationships, associations.
 - the formal operational stage, between 12 and 15 years of age, a stage in which the child begins to reason logically and systematically

Wallon's theory (1975) states that the motion, reduced to the muscular contraction that produces it, or to the movements in space that follow, is only a physiological or mechanical concept, the motor gesture having a double purpose - to produce a change of the external world, triggering an action, and to make the outer world resonate.

Wallon lays the foundation of the theory of development, in which the understanding of the different concepts guides teachers towards the process of forming the person, under the influence that the social environment has on the individual (Mendoza, 2007). Based on this theory, the teacher is able to innovate pedagogical practices, permanently adding challenges to the student's motor and logical side. In Wallon's psychogenic theory, the development process encompasses two branches: on the one hand, the bodily, cognitive, emotional components and, on the other hand, the motor component.

Wallon (1975), quoted by Lazano et al. (2014-2015), defines psychomotor activity as a motricity of relationships. In his view, psychomotor activity in the activity of the child depends on two factors: the first factor is kinaesthesia, also called deep sensitivity, which can be visceral and proprioceptive or postural (the sense of posture, the perception of motion), and the second factor is the exteroceptivity (sensory sensitivity). The authors note that Wallon believes that one's own body is not only related to the circumferential space, but may be able to "live" through the body of the others and, gradually, by means of the experiences gained through motion, to develop in a more complex way the use of one's body and, subsequently, to draw up the body scheme.

The Spanish and Portuguese literature, represented by Berruazo and Victor da Fonseca, provides us with new insights into the concept of psychomotor activity. Oliveira (2001), quoting Fonseca, argues that an exaggerated analysis, which would lead to the error of seeing two distinct components (the mental component and the motor component), should be avoided since both are, in fact, the same. Also, for Oliveira, psychomotricity does not exclude a new "school" or a conceptual "current", but it is a technique, a process that focus on educational purposes through the use of the human motion (Oliveira quoting Fonseca, 2001).

In defining psychomotor activity, the authors refer to the organization and coordination of movements, the addition of the motor act in the process of knowledge and activity, in the neuropsychic development, in the perceptive-motor development, in the maturation of the nervous system, in the degree of physical, intellectual development, and emphasize the regulatory role of the word in performing the action. Therefore, one may conclude that psychomotor activity is a complex function, which integrates and harmonizes aspects of physical, motor and mental development.

In occupational psychology, psychomotor activity is synonymous with fine motor skills, the term psychomotor including all skills or abilities such as dexterity, ease of handling, motor skills, or hand-eye coordination.

Components of psychomotricity

Psychomotor education aims at developing the child's body autonomy. This is reflected in the mastery of one's own body in order to be able to act and communicate in an efficient manner, adapted to the environment. Besides the concept of psychomotricity, its components have also aroused the interest of theoreticians and researchers in different fields. Synthesizing the works of different specialists, Alexe (2012) describes only

four components: the body representation; laterality; ideomotricity; motor intelligence.

The domain-specific literature offers several classifications of the components of psychomotricity. Picq and Vayer (1971) or Muşu and Taflan (1999) perform a classification of the psychomotor components based on the existence of essential behaviours, namely the neuromotor behaviours, the basic motor behaviours and the perceptual-motor behaviours and structures. Other specialists developed classifications that include a variable number of psychomotor components. Grosu (2009) considers that these components are 9, Preja (2014) 4, Horghidan (2000) 7 and Epuran (2013), quoting Fleishman, performs a classification comprising 10 components.

As a result of this variety and by studying them, but also in accordance with the trends found in more recent sources of documentation from the last 10 years, we concluded that psychomotricity essentially comprises 9 components of psychomotor activity, namely: the body representation, laterality, balance, ambidexterity, eye-hand or foot coordination, fine and global motricity, precision and balance, perceptual-motor coordination (perception of space, time and of one's own movements) and ideomotricity.

These components of psychomotricity are schematically shown in Figure 2. The means of improving the manifestation indices of these components is permanently brought to the attention of specialists from all over the world who carry out studies for each component at different age levels. The educational aspects are found in the way the training programs proposed by the studies are structured. (Iconomescu et al., 2017). Further on, we shall briefly present information about each component as we found it in the specialized literature, in the general acceptance of the specialists from different fields.

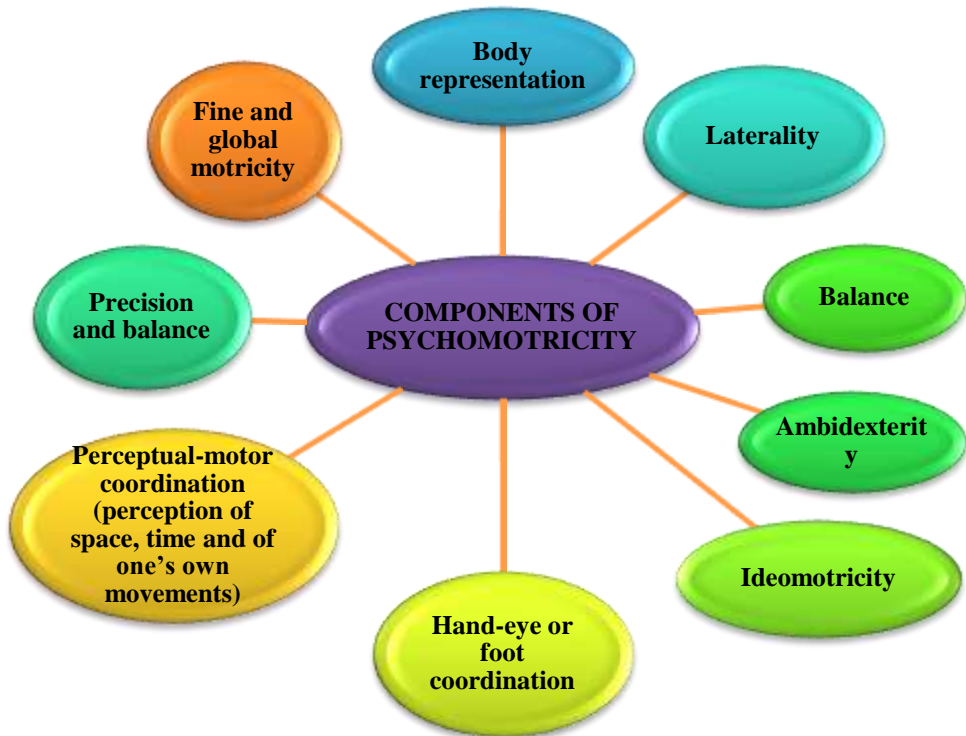


Fig. 2. The diagram of the elements that make up psychomotor activity

The body representation is the mental representation of one's own body, both in a static and dynamic situation, of its limits and possibilities in relation to the others and to the social environment.

Some authors consider that the term body representation is synonymous with the term body image. In neurology, body image is defined as the process of cerebral integration of an acquisition. The integration process involves the identification, location and orientation in space of the various body segments. In this case, the concept of body representation is preferred (Abălașei, 2016).

Arseni, Dănilă, Golu, quoted by Mitrache & Tudos (2004), consider that the representation on the cerebral cortex of each segment of the body, from the point of view of the kinaesthetic sensitivity, which is proportional not to the actual size, but to the functional value of the segment, is essential for the formation of the body representation.

Studies carried out during our research by authors such as Merida-Serrano et al. (2018), Martínez & Anton (2018), Wallon (1975) pointed out

that the body representation is not a biological, innate component, but it is gradually acquired in the ontogenetic development of the individual, which is achievable by the individual's ability to relate to external landmarks, initially by reference to the others, and not to one's own person.

By looking into the psychology and neuropsychology studies, Alexe (2012) concludes that, in relation to the accumulation of visual, cutaneous, vestibular and postural information, the body representation is neither stable nor homogeneous, because not all its aspects can be objectively differentiated by the individual.

Laterality is related to the dominant function of a cerebral hemisphere, a function that determines the inequality of the right and left halves of the body. The phenomenon of sensory and motor asymmetry is innate and is based on a certain functional organization of brain structures (Cro et al., 2011)

The hemispheric prevalence, as well as the asymmetry between the two equal parts of the body, are areas of interest and, lately, researchers such as (Bora, Cardoso, & de Toni, 2019); (Esteban et al., 2019; Fagaras, Rus, Vanvu, Sandu, & Frunza, 2014) have tried to define the asymmetry between the right-left parts of the brain and the degree of neuropsychiatric development of young children.

The general coordination consists of integrating different parts of the body in an orderly movement, with minimal energy consumption. From a global point of view, coordination involves carrying out general movements, with all the parts of the body in a harmonious way, with the age-appropriate amplitude.

Dynamic coordination is the acquired ability that controls different parts of the body (the upper and lower limbs, and the torso) whose purpose is to voluntarily move a segment in view of performing a given task.

This component does not only allow motion, but also the synchronization of movements, fighting difficulties and ensuring uniform actions (Juliano et al., 2016). An effective coordination gives the child self-confidence, making him aware of the potential of his own body in different situations.

Coordination is conditioned, according to the authors' opinion, by a number of factors such as the degree of neurological development, which increases with age; avoidance of inhibitions; stimulation and an appropriate external environment; the ability to understand the tasks (from which part to perform a task, how to perform it), different methods of representing movement as accurately as possible and analysing the environment in order

to acquire skills that favour the acquisition of new abilities, the knowledge of body parts and of their synchronization.

Balance represents the ability to adopt and maintain a body position opposed to the gravitational force. The sense of balance is complex and allows the appreciation of the position of the head as compared to the body and the position of the body as compared to the environment. It presupposes the ability of correct orientation of the body in space, ensured by the ordered relationship between the individual, his own body representation and the external environment.

Balance is represented by a situation in which the person can maintain an act or gesture, can remain still or propel his/her body into space using the resistance of gravity.

The neurological origin of balance is presented by Pendefunda et. al (1992) as the static balance and the postural control that is achieved by the contraction of some muscle groups of the torso in relation to the position of the head in space. The authors consider that this is achieved through an activity coordinated by the central nervous system, in which the vestibular system, the conscious and unconscious deep sensitivity, the extrapyramidal system and the visual analyser intervene. Balance disorders affect the body representation and lead to difficulties in the spatial-temporal orientation (Noguera et al., 2019). Moreover, it can cause insecurity, anxiety, imprecision, poor span of attention and, in some cases, inhibition.

According to the specialists who studied aspects related to the development of balance, this is directly associated with the following systems: the labyrinth system; the system of pleasant sensations; the kinaesthetic system; the visual sense; balance reflexes.

Fine and gross motor skills represent the body's ability to perform movements that involve muscle groups in different proportions. Large muscle groups are involved in movements without a high degree of precision in order to perform actions such as jumping, running, climbing, crawling, dancing. Fine motility is the ability to use small muscle groups to perform specific movements: brow frowning, lip tightening, fist closing, but also movements that require the use of hands and fingers.

Fine motor skills imply a superior maturation at the neurological system, depending on many factors such as the learning process, the degree of stimulation and the personal ability of each child, according to age (Noguera et al., 2019).

The child is initially only capable of overall movements such as global withdrawal or approach, or accidental twisting and turning of the

whole body. From this amorphous matrix, finer activities gradually emerge (Gordon, 1991).

The overall motricity is conditioned by the postural balance of the individual. This balance is subordinated to the proprioceptive and labyrinthine sensations. These activities lead to a global awareness of the body, in relation to how a neuromuscular act requires at least stamina and muscular strength to perform actions such as jumping, rolling, pushing, pulling, swimming, launching, hitting, sitting down (Oliveira, 2001).

The perceptual-motor coordination refers to the perception of positions, shapes and directions, the perception of spatial-temporal organization, the eye-motor coordination, understanding and mastering the coordination of one's movements and gestures. (Fenollar-Cortes et al., 2017). According to Horghidan (2000), spatial orientation represents the structuring of the environment by reference to oneself as a reference element and then to the other static or moving objects or persons.

The spatial organization starts from the sensory-motor level of the perceptions connected with the action and relies on the knowledge of the body representation and of the notion of left and right (Martinez & Anton, 2018). The notion of space is complex and appears progressively during the psychomotor development of the child (Juliano et al., 2016).

Development begins with the differentiation of the corporeal self (the body) in relation to the environment. An interior space is developed within which the body representation will gradually differentiate. This perception of the body space is both proprioceptive and exteroceptive. After the perception of one's own body, the possibility of perceiving the outer space appears. This outer space is explored starting from the proprioceptive and exteroceptive perception. The spatial-temporal orientation of children represents a topical subject and many researchers, like Glushkov & Pacheva (2014), approach in their works the problem of spatial-temporal orientation as a subject of major importance in forming a representation of one's body, which is as accurate as possible in relation to the spatial and temporal dimensions.

The eye-hand coordination is the ability to make an adjusted visual control movement. Eye contact with a moving object or an object at rest is what causes the accurate execution of the movement in order to grab a particular object or to kick it.

Here we may also mention the visual contact with the object that causes movements with precise impulses, adjusted to the weight and dimensions of the object on which we want to act in order to perform a task (da Silva et al., 2017).

Ideomotricity is the intimate mechanism of linking representation with movement. It expresses the representation of movement in performing the motor act and, at the same time, the role of movement in generating images (Sas et al., 2017). Ideomotricity ensures the transition from the perceived image of the movement model to the transposition into representation of one's own movement and to the creation of the action plan (Horghidan, 2000). The results of the experimental research highlighted that, in the formation of the motor skills, the image depends on the action, its improvement resulting in the enrichment of the mental representation. Thus, a greater efficiency can be obtained in learning the operations when the orientation in the learning process is not towards the result of the action, but towards the execution mode. The experience of moving one's own body is related to the formation of ideomotor representations that are found in a previous motor experience specific to the task (Sas et al., 2017). The ideomotor phenomenon is the basis of the mental training, the training of the complex activity of the body through the representation of the motor act (Vizcaino-Torres et al., 2015).

Considering the characteristics of these components, we can conclude that specialists from different fields, in which psychomotor activity manifests interferences, underline the connection between the mental and the physical components, between the mental and the motor features manifest in men since birth, throughout life. Educating behavioural acts helps the individual to know the environment around him, to know himself and to fit in.

The evaluation of psychomotor components

The evaluation is a natural process of any type of activity. For education, the evaluation is an essential moment for both participants in the education process. The evaluation is a feedback that indicates whether the measures, methods, means, exercises, accessories, or the work environment selected have the expected results or not.

From the study of the psychomotor-related literature, we found out that it offers several evaluation test models. Some of these are used in research, at the end of a period when specialized curricula were applied (Mas et al., 2018). The same evaluation tests are used to investigate the psychomotor potential of individuals or of a particular component. Also, evaluation tests are used for the purpose of diagnosing motor or mental disorders.

Following the application of the psychomotor evaluation tests, the psychomotor profile of the student is drawn up, through which the degree of mental and motor development of the child is validated, based on scales that indicate a normal development at different age intervals (da Silva et al., 2017). The importance of early detection of the child's development pattern, based on tests, is also supported by Aviles et al. (2018) that consider school age as the optimal period for the testing and detection of the potential delays and the existing deficiencies.

For the evaluation process, we found several scales described in the domain-specific literature. Numerous doctors and psychologists, in trying to track the normal level of development of the child at different ages, created detailed development inventories. From the bibliographic references studied, it was found out that there are several scales that are unanimously accepted.

The Gessel scale, which is a development inventory intended for the examination of children between 4 weeks and 5 years, an inventory which was later on expanded up to 10 years of age. The inventory comprises between 28 and 46 items (the differentiation being made by age) and refers to the motor, verbal and the social adaptation behaviour.

The Brunet-Lezine scale is a French adaptation of the Gessel scale, drawn up for the purpose of early detection and diagnosis of mental deficiency at an early age. The scale follows the investigation of four areas: motor-postural; language; behaviour of adaptation to objects; social and personal relationships.

The Oseretsky scale - for older children (which was revised and calibrated several times by E. Guillmain, E. Stamback, W. Sloan). The original Oseretsky scale consists of an inventory of 85 items, divided into six subgroups (subtests) by age levels, between 7 and 16 years of age. The scale refers to general static coordination, manual dynamic coordination, motor speed and simultaneous voluntary movements.

Depending on the particularities of the psychomotor components there are in the specialized literature various tests that respond to the studied aspects. For manual dexterity we identified *the Points test*, in which the subject must draw with the pencil, one point in each of the 100 squares, first with the dominant hand, then with the other; *the Tapping test*, in which the subject must perform, first with the dominant hand, as many points on the sheet of paper, for 6 seconds, the same thing being repeated with the non-dominant hand, on the other sheet; *the Pearls test*, in which the subject must put on a thread a number of 30 beads having a hole in the middle, in groups of 4 beads; *the Balls test*, in which the subject must put, with the dominant hand, by means of a tweezer, 30 balls into a bottle; *the Ozeretsky-Guillmain test*,

which aims at identifying the main motor components under the five aspects: speed, strength, endurance, related to the dynamic hand and general coordination, balance and speed.

From the point of view of the development level of the coordination capacity, we identified in the studied literature *the general coordination test, Denisiuk, the general coordination test, Matorin, the Bruininks-Oseretsky test* for segmental coordination and for the upper limbs. There are also approaches that propose a series of exercises that can be used as tests to verify the level of coordination development (Grosu 2009).

For balance, we identified evaluation tests such as *the Flamingo test*, in which the subject stand by using one leg, the other leg being bent and the time in which the subject maintains his/her position is recorded until the bent leg touches the ground, *the Bruininks-Oseretsky balance test*. In the same category we found other tests such as *the classic Romberg test*, in which the subject closes the eyes for 20-30 seconds with the legs close together and the degree of balancing against the vertical axis is measured. A variant of this test is performed by placing the feet in one in front of the other.

The test of the "push", which has two modes of execution: the first one is made from orthostatism, as in Romber. In this mode of execution, short unannounced pushes are applied to the subject at the level of the sternum, of the back, of the pelvis, of the subject's side and we evaluate his / her balance. In the second mode of execution, the subject fights back when pushed. *The unipodal test* takes place on one leg, the subject having his arms crossed on the chest. It is timed for how long the subject can maintain its balance (30-150 sec). The degree of complexity can be increased by bending the knee or by using *the Berg balance scale*, which is a list of 14 actions that the child must perform. *The Bass test* also evaluates the balance by maintaining it for 5 seconds while standing on a certain area marked on the ground. The route includes 10 points and the tested subject can obtain a maximum of 100 points if he finishes the entire route without putting the foot on the ground.

The domain-specific literature also presents some tests for motor ability, the precision of movements, ambidexterity and laterality (Rodriguez & Giraldez, 2016).

We believe that the variety of trials and evaluation tests results from the complexity of the phenomenon studied and from the multitude of components that are included in the psychomotor activity.

Conclusions

The detailed analysis of multiple information sources led to several conclusions regarding the aspects implied by psychomotricity. A first conclusion refers to the fact that there are many ways of defining the term psychomotor activity, but all these definitions have as common denominator correlated aspects between the mental and the motor components, between thinking and performing actions that involve motion.

Another conclusion is that the specialists in different fields made different classifications that tried to highlight direct aspects related to their field of activity. The field of medical sciences seeks to highlight the therapeutic role of psychomotor activity. Accordingly, the psycho-emotional aspects are evaluated in all persons with disorders, regardless of age. The field of psychological or psychiatric sciences also emphasizes the therapeutic side of psychomotricity as a possibility of recovering from disorders of a psychological or psychiatric nature. For them, activities that involve psychomotor content can be found in people with mental disabilities until they are older or even throughout one's life, as a form of therapy. From the point of view of education sciences, psychomotricity is a way of learning, of knowing the environment or one's self, of discovery through movement activities. The formative values are manifest especially in children, during the school period.

Another conclusion was that most specialists agree that psychomotor training can be highly and effectively educated during childhood, that is, until the age of 11-12. After this age, the aspects of psychomotor activity become the focus of therapeutic activities for people who have all kinds of physical or mental disorders, regardless of their severity.

The specialists agree that, by the approach of the components related to psychomotricity, they address either the mental or the physical aspects. The conclusion is that, by means of psychomotricity, the individual cannot be delimited from his actions or the thought process, these coexisting permanently and influencing each other.

A generally valid aspect is that, in most specialists, we came across the idea that psychomotor activity has a multidimensional character in which the emphasis is placed on the educational component. The interdisciplinary character of psychomotricity is emphasized by the way in which it is used in practice and by the variety of fields that approach it.

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