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A-do-le-ta¹: movement and development from 0 to 3 years old

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ABSTRACT. Discussions about childhood have been constant in research carried out in recent decades, since puerile education has taken shape through its legal insertion in basic education, raising concerns about the role of daycare for young children. Under this aegis, this article, based on qualitative research of a bibliographic nature, aims to promote reflections about the contributions of the Historical-Cultural Psychology theory in relation to the importance of movement for the development of children from birth to 3 years old. The study presents the social relationship, mediated by language, as a conductor of thought and motor action, being a preponderant factor for the intentional mastery of movements and for the appropriation of body knowledge. In early childhood education, national official documents recognize the importance of working with the body and indicate that in daycare, a space that allows for more organized social interactions, it is necessary to implement pedagogical practices that explore the child's body in various possibilities. The study could conclude that movement is a motor activity that must be developed, and must be considered in the actions taken by the teacher, in order to promote the appropriation of human culture.

Keywords: historical-cultural psychology; movement; development; childhood.

A-do-le-ta: movimento e desenvolvimento de 0 a 3 anos de idade

RESUMO. As discussões sobre a infância têm sido constantes nas pesquisas realizadas nas últimas décadas, já que a educação pueril passou a tomar corpo mediante a sua inserção legal na educação básica, suscitando inquietudes sobre a função da creche para a criança pequena. Sob essa égide, o artigo posto, sustentado na pesquisa qualitativa de cunho bibliográfico, objetiva promover reflexões acerca das contribuições da teoria da Psicologia Histórico-Cultural em relação à importância do movimento para o desenvolvimento das crianças desde o nascimento até os 3 anos de idade. O estudo apresenta a relação social, mediada pela linguagem, como condutora do pensamento e da ação motora, sendo fator preponderante para o domínio intencional dos movimentos e para a apropriação dos conhecimentos corporais. Na educação infantil, os documentos oficiais nacionais reconhecem a importância do trabalho com o corpo e indicam que na creche, espaço que possibilita interações sociais mais organizadas, é preciso efetivar práticas pedagógicas que explorem o corpo da criança nas variadas possibilidades. O estudo pôde concluir que o movimento é uma atividade motora que deve ser desenvolvida, devendo ser considerada nas ações realizadas pelo professor, a fim de promover a apropriação da cultura humana.

Palavras-chave: psicologia histórico-cultural; movimento; desenvolvimento; infância.

A-do-le-ta²: movimiento y desarrollo de 0 a 3 años

RESUMEN. Los debates sobre la infancia han sido constantes en las investigaciones realizadas en las últimas décadas, ya que el cuidado de los niños ha empezado a tomar forma mediante su inserción legal en la educación básica, lo que ha suscitado inquietudes sobre el papel del cuidado de los niños pequeños. Bajo esta base, el artículo, apoyado por una investigación cualitativa de carácter bibliográfico, tiene por objeto promover la reflexión sobre las aportaciones de la teoría de la Psicología Histórico-cultural en relación con la importancia del movimiento para el desarrollo de los niños desde el nacimiento hasta los 3 años de edad. El estudio presenta la relación social, mediada por el lenguaje, como conductor del pensamiento y la acción motriz, siendo un factor preponderante para el dominio intencional de los movimientos y para la apropiación del conocimiento corporal. En la educación de la primera infancia, los documentos nacionales oficiales reconocen la importancia de trabajar con el cuerpo e indican que en la guardería, un espacio que

¹ A children's game known in English as "pat-a-cake" or "pattycake", based on an old English nursery rhyme.

² Brincadeira conhecida, no espanhol, como 'juego popular de manos'.

permite interacciones sociales más organizadas, es necesario aplicar prácticas pedagógicas que exploren el cuerpo del niño en diversas posibilidades. El estudio concluyó que el movimiento es una actividad motriz que debe ser desarrollada y considerada en las acciones realizadas por el profesor para promover la apropiación de la cultura humana.

Palabras clave: psicología histórico-cultural; movimiento; desarrollo; la infancia.

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Introduction

The body is a biological, historical, and social totality full of meaning for the human race. From birth, body and movement allow subjects to experience getting to know themselves and appropriating the surrounding culture.

Considering early childhood education, it is argued that the body is the primary sensitive, perceptive, communicative, expressive, and relational agent. Bodily sensations as well as the language of movement encompass learning about motor possibilities and are related to the development of higher psychological functions.

Human psyche linked to the cognitive functioning of the human being was studied by the main proponents of Historical-Cultural Psychology, L. S. Vygotsky, Alexis N. Leontiev, and Alexander R. Luria. The authors focused on the content in “[...] cognitive psychology (perception, memory, attention, problem solving, speech, motor activity)” (Cipolla-Neto et al., 2010, p. 15, our translation).

The results of research that compile Historical-Cultural Psychology indicate an intertwining between intellectual development and the culture in which individuals are inserted. Guided by the field of the aforementioned theory, this study analyzes the relevance of the appropriation of movement as a bodily possibility capable of providing learning opportunities based on the main activities that characterize the periods that comprise ages between 0 and 3 years old (Elkonin, 1987).

To do so, the main official documents that guide early childhood education are investigated, intending to analyze how they direct corporal pedagogical practices in educational environments. The documentary appraisal considered the National Curriculum Reference for Early Childhood Education (1998), the National Curriculum Guidelines for Early Childhood Education (2010); the National Foundation for a Common Curriculum (2017).

Using bibliographic analysis, the study examines teaching work in the education of young children, considering the movement as an investigative focus. In this search, the researcher’s perception of the world and that of the examined field are linked throughout the knowledge process, from the origin of the object of study to the results and their applicability (Minayo, Deslandes, & Gomes, 2016).

It is noteworthy that this study intends to incite a debate that emphasizes, from the conception to the proposition of educational intentions, the education of movement in childhood, aiming at the integral development of the human being.

Considerations of Historical-Cultural Psychology on human development

The child’s movement in the world is the result of two factors that intertwine and complement each other: biological and sociocultural. Considering the perspective of Historical-Cultural Psychology, it can be said that human development is affected by the relationship between these two interdependent factors. On this aspect, Vygotskiĭ et al. (2010, p. 35, our translation) define that there are

[...] two qualitatively different lines of development, differing in their origin: on the one hand, the elementary processes, which are of biological origin; on the other hand, the higher psychological functions, of sociocultural origin. The history of the child’s behavior is born from the intertwining of these two lines.

The author’s argument indicates that the appropriation of human movement is constituted in the relationship between the child and the social environment so that the transmitted culture is decisive for the motor appropriation and the development of higher psychological functions. Marx (1984) distinguishes the importance of higher psychological functions when he considers that spiders are capable of weaving a web with precise and perfect movements, but, even being the worst architect, the human being differs from the spider, because he or she is capable of creating, in his or her mind, the object to be built even before starting its construction.

Marx's perspective (1984) shows that human beings can establish conscious relationships with their surroundings. The child, having a relationship with the other and through movement, becomes able to touch, feel, manipulate and explore the surroundings to apprehend reality. This possibility develops higher functions such as sensation, perception, memory, attention, speech, problem-solving, and motor activity. Consequently, there is a transformation of the psychic structure and changes in behavior. The child, therefore, starts to move in space intentionally, according to his or her will.

[...] influenced by Marx, Vygotsky concluded that the origins of higher forms of conscious behavior were to be found in the social relations that the individual maintains with the outside world. But man is not just a product of his environment, but also an active agent in the process of creating this environment (Luria, 2010, p. 25, our translation).

It is observed, in the description of Luria (2010), that the intentional and conscious possibilities of behavior are constituted in the social relations mediated by those who own the culture and transmit it. The reach of higher psychological functions is correlated to the intertwining of physical maturation and sensory mechanisms with culturally determined processes (Luria, 2010). In this correlation, it is clear that the child appropriates his or her body and develops an intentional movement based on the relational and material possibilities found in his or her social context. González and Schwengber (2012, p. 73, our translation) define:

[...] corporeality is constituted in a biocultural way, it unites biophysical aspects and cultural and symbolic repertoires, with their existential meanings and senses. The body, then, results from social interactions, has plasticity, and is immersed in a broth of culture and history.

The cultural and symbolic repertoires mediated by the teaching of the tools and signs of culture elucidate that human capabilities derive from social relationships, and language is fundamental in this process.

The cultural aspect of Vygotsky's theory involves the socially structured ways in which society organizes the kinds of tasks that the growing child faces, and the kinds of tools, both mental and physical, that the young child has available to master those tasks. One of the basic instruments invented by humanity is language, and Vygotsky gave special emphasis to the role of language in the organization and development of thought processes (Luria, 2010, p. 26, our translation).

Based on the assumptions of this theory, it is possible to affirm that language is a communicative tool that transmits the knowledge historically accumulated by humanity, at the same time that it conducts action and thought. Luria (2010) points out that, initially, the motor and verbal aspects are aggregated. He exemplifies with the following context: a child of approximately 3 years old, when placed in a problem situation in which their objective is to reach a sweet that is out of their reach, in the search to solve it, uses speech as a guide for thought.

[...] 'this candy is so high' (at this moment, the child climbs on the sofa and jumps up and down). 'I have to call Mum, so she can get it for me' (the child jumps a few more times). 'There is no way to reach it, it is so high' (at this moment, the child takes the stick and looks at the candy). 'Daddy also has a tall closet, and sometimes he can't reach things. No, I can't reach it with my hand, I'm still too small. Better get on the bench' (the child gets on the bench, and waves the pole in a circle, which hits the cupboard). 'Pam, pam' (at this moment, the child starts laughing, takes a look at the candy, picks up the stick, and throws the candy out of the cupboard). 'Here it is! The stick reached it. I have to take this stick home with me' (Luria, 2010, p. 30, our translation).

Note that verbalization helps in the elaboration of the action, acting as an organizing agent of conduct, as the child uses speech to organize their actions. Consequently, there is a restructuring of motor behavior: instead of natural and involuntary movements, there is an intentional mastery of movements. This perspective is possible because the child is guided by external principles. Luria (2010, p. 31, our translation) exposes:

[...] suppose we wanted to study the acquisition of jumping movements. In very young children, leaps occur only when the immediate context, including the child's own desires, demands it. Jumping 'simply happens'. We cannot evoke it. Then, little by little, the child begins to use auxiliary stimuli to direct his own movements. At first, these auxiliary stimuli are of external nature; a board is placed in front of the child to guide the jumps, or else an adult gives a verbal command: 'Jump'. Later, the child can achieve the same level of efficiency by giving himself an order, saying the word 'jump' in a whisper. Finally, the child can simply think 'jump', and the movements will unfold voluntarily.

Language, therefore, is related to intentional and complex movements, being a mechanism of control and organization of conduct. In summary, the contributions of Historical-Cultural Psychology to the understanding of human development demonstrate that the human being is not born with the motor possibilities developed, but, through social activity, the movements become conscious.

Leontiev (2010, p. 65, our translation) analyzes that there are activities that are decisive for learning and development, the so-called guiding or main activities, which are thus conceptualized by him: “[...] activities whose development governs the most important changes in the psychic processes and psychological traits of the child’s personality at a certain stage of its development”.

To cover the relevance of motor activity, the research turns to the study of movement and the importance of exploring it in school teaching, considering the periods and activities that guide child development from 0 to 3 years old.

The importance of early childhood movement work

As we saw earlier, human development happens mainly through social contact, emphasizing that the subject is a social and historical being, that is, what happens in their development is the result of everything that humanity has historically built in society and which is transmitted to the subject through social contact.

Movement is a very important aspect when discussing human development; in this sense, the smaller the child, the more important it becomes, since, mainly through it, young children interact socially and explore the world around them, acquiring new knowledge. As it is something so essential for young children, movement is an aspect that cannot fail to be recognized and worked on with children from 0 to 3 years of age, as it “[...] has great importance in child development, and therefore it is necessary that there is the intention of teachers about movement activities” (Iza, 2008, p. 37, our translation).

It is worth mentioning that, in the daycare center, working with the movement has its essentiality placed in the laws that govern early childhood education, since several documents emphasize such importance. In general, these laws seek to guarantee the rights of all children. We will then highlight some of these legal documents that discuss, with greater intensity, the movement.

In this sense, in 1998, the National Curricular Reference for Early Childhood Education (RCNEI) was published, which, in volume 2, mentions movement, placing it as an axis to be worked with young children, defining it as

[...] an important dimension of human development and culture. Children move from birth, acquiring more and more control over their bodies and increasingly appropriating the possibilities of interacting with the world. They crawl, walk, handle objects, run, jump, play alone or in groups, with objects or toys, always trying new ways to use their body and movement. When moving, children express feelings, emotions, and thoughts, expanding the possibilities of meaningful use of gestures and body postures. Human movement, therefore, is more than a simple displacement of the body in space: it constitutes a language that allows children to act on the physical environment and act on the human environment, mobilizing people through its expressive content (RCNEI, 1998, p. 15, our translation).

As stated in the document itself, through movements, children perform and act in society, appropriating human culture socially elaborated in the course of history.

Another important document that guides early childhood education is the one that defines the curricular guidelines specifically aimed at this stage of education. Resolution No. 5 of December 17, 2009, established by the Ministry of Education and the Basic Education Secretariat, gave rise to the National Curriculum Guidelines for Early Childhood Education (DCNEI).

This document that regulates early childhood education defines principles and objectives to be achieved in working with the little ones, outlining, for that, guidelines for the organization of teaching. Regarding the movement, in item 7, “Organization of space, time, and materials [...]”, body movement appears articulated to the spaces to be explored with the children; in this item, the document defines that “[...] to achieve their objectives, the pedagogical proposals of Early Childhood Education institutions must provide conditions for collective work and for the organization of materials, spaces, and times” (DCNEI, 2010, p. 19, our translation). As for these conditions mentioned in the document, they must ensure some aspects directly linked to the movement, which are: “[...] the displacements and wide movements of children in internal and external spaces to the reference rooms of the classes and of the institution” (DCNEI, 2010, p. 20).

Another document that emphasizes the importance of working the movement with children in early childhood education is the BNCC, which deals with the movement in a field of experience named “[...] body, gestures, and movements” (BNCC, 2017, p. 36, our translation). In this field of experience, the BNCC establishes that children, from birth, use movement to explore everything around them, either intentionally or spontaneously. In this sense, the document clarifies that, when moving, children establish relationships and get to know their own bodies:

In Early Childhood Education, the children's body gains centrality, as it is the privileged participant in the pedagogical practices of physical care, oriented towards emancipation and freedom, and not towards submission. Thus, the school institution needs to promote rich opportunities so that children can, always animated by the playful spirit and in the interaction with their peers, explore and experience a wide repertoire of movements, gestures, looks, sounds, and mimics with the body, to discover various modes of occupation and use of space with the body (such as sitting with support, crawling, slipping, walking on cribs, tables and ropes, jumping, climbing, balancing, running, somersaulting, stretching, etc.) (BNCC, 2017, p. 37, our translation).

Children's bodies play a central role in early childhood education and, therefore, movement should be explored emphatically in pedagogical practice, to promote children's learning and development, enabling them to establish social relationships and the knowledge of the world and of themselves.

It should be clarified that the movements dealt with in this article are not an action without intention or purpose; they are not those "[...] called involuntary because they are controlled by subcortical nerve pathways (cerebellum, extrapyramidal pathways, reticular formation, and others), and depend on the quantity and quality of sensory stimuli that the child receives" (Kolyniak Filho, 2010, p. 56-57, our translation). The movement emphasized here is the one developed historically and socially; the one which is passed on from generation to generation, socially learned, and provided with intentionality. Following this conception, it is possible to say that movement was part of the historical transformations of man as a species (phylogenesis) and is part of the development of each subject (ontogenesis). This means that the phylogenetic process is repeated, even if abbreviated, in human ontogenesis, as Engels points out (1986, p. 32, our translation):

[...] the development of the human fetus in the mother's womb is a faithful but abbreviated replica of the entire history of the physical development of our ancestors in the animal kingdom, through millions of years, from the larval stage. The same happens with the spiritual development of the child, which also repeats, in a more abbreviated form, the intellectual development of these same ancestors, at least of the closest ones.

In this sense, the movement was part of the human transformation and is part of the development of each subject, allowing man to hominize themselves historically and enabling the humanization of each subject in the process of hominization, as mentioned in Leontiev (2004, p. 280, emphasis in the original, our translation):

[...] hominization resulted from the transition to life in a society organized on the basis of work; that this passage changed their [i.e., human] nature and marked the beginning of a development which, unlike the development of animals, was and is subject not to biological laws, but to 'socio-historical laws'.

Hominization is the phylogenetic development of the human species; such development, unlike that of other animals, was subject to social and historical laws. On the other hand, the humanization process takes place from birth through social contact.

The child, at birth, presents him- or herself only as a member of the human animal species that, little by little, with the work of transmitting human culture carried out by the surrounding adults, becomes a member of the human race, of humanity (Arce & Baldan, 2012, p. 189, our translation).

In the process of hominization, the movements were historically and socially developed and became increasingly complex. In turn, in the process of humanization, the child appropriates gestures, movements, and social expressions, which are specifically human, and have meaning in the social environment, being developed only through contact with others.

This social movement cannot be developed in any other way than through contact with society, as it is a specifically human characteristic. Movement and other characteristics that only humanity presents are higher psychic functions, as highlighted by Vygotski e Luria (2007, p. 43-44, emphasis in the original, our translation):

These functions are not, from the point of view of phylogenesis, a product of the biological evolution of behavior, but a product of the historical development of the human personality. From the point of view of ontogenesis, these functions also have their own developmental history, closely connected to their biological formation, but not coincident with it and, together with this biological line, these functions build a second line in the child's psychic development. We call these 'higher functions' and, by them, we mean, first and foremost, their role in the development plan; to distinguish them from the biogenesis that designates the lower functions, we focus on naming their history of formation and development 'sociogeneses of higher psychic functions', thus emphasizing the social nature of their emergence³.

³ "Estas funciones no son, desde el punto de vista de la filogénesis, producto de la evolución biológica de la conducta, sino producto del desarrollo histórico de la personalidad humana. Y desde el punto de vista de la ontogénesis estas funciones cuentan también con una historia propia de desarrollo, estrechamente conectada con su formación biológica."

Higher psychic functions are social and historical products; they are what characterize subjects as specifically human. In other words, “[...] the higher functions of perception, memory, attention, movement, and others”⁴ (Vygotski & Luria, 2007, p. 49, our translation) are those that express human identity; without their development, there is no human essence, humanization. It is important to note that such functions do not develop autonomously, but jointly. Regarding this relationship, the authors highlight:

And this confronts us with a conclusion of great theoretical importance. Based on the great similarity in the essential that is manifested in its origin and in its development, we must consider the unity of the higher mental functions. Functions such as voluntary attention, logical memory, and the higher forms of perception and movement, which until now had been investigated separately, as independent psychic facts, appear in the light of our experiments as phenomena essentially of the same order: united in their genesis and in their psychic structure (Vygotski & Luria, 2007, p. 48, our translation)⁵.

Understanding that the higher psychic functions develop together, it can be said that the teacher, when working on movement with young children, is not only developing the motor aspect but the child as a whole, because, for there to be intentional movement, other functions are worked upon, also developing the psychic and affective aspects, since, when moving, the child analyzes their actions and relates to the social environment. For there to be, in fact, a good job with the movement in early childhood education, teachers must understand its relevance so that they do not get stuck in the erroneous understanding that the movement develops independently. In that regard:

[...] despite the apparent naturalness of motor development, it is, like the other processes, habituated to the social conditions of the child's development. The access and manipulation of social objects must, therefore, operate at the service of the most diverse psychomotor domains, starting with those required for their correct use (Martins, 2012, p. 113, our translation).

Thus, in this article, it is believed that working with the movement should be considered something essential in the educational process and, therefore, it needs to be intentional, to understand and support the children's development process.

The conception of movement based on the periodization of development: the relevance of pedagogical intentionality

The analysis of conscious motor activities as specific capabilities of the human species encourages us to consider the importance of the presence of movement in educational proposals for childhood, considering its promoting character of physical, psychic, and emotional development.

The study, by resorting to the analysis of Historical-Cultural Psychology, clarifies that the development of higher psychological functions, including motor exercise, is linked to the individual's activities in the world. Leontiev (2010) focused on the study of activity as a possibility of expanding consciousness.

In studying the development of the child's psyche, we must therefore begin by analyzing the development of the child's activity, as it is constructed in the concrete conditions of life. Only with this mode of study can the role of both the external conditions of their life and the potentialities they possess be elucidated. It is only with this mode of study, based on the analysis of the content of the child's activity in development, that we can adequately understand the guiding role of education and creation, operating precisely in their activity and their attitude towards reality, and determining, therefore, their psyche and conscience (Leontiev, 2010, p. 63, our translation).

Leontiev (2010), when addressing the importance of activity for the formation of consciousness, clarifies that there are activities that have greater relevance than others, they are the so-called main, guiding, or dominant activities. It should be noted that such activities are linked to periods of human development.

The main activity is related to the formation of the higher psychological functions characteristic of each period. As learning expands, there is a reorganization of psychic abilities, generating reasons for new learning, which, consequently, unfold into a new period of development.

pero no coincidente con ella y que conjuntamente con esa línea biológica construyen una segunda línea en el desarrollo psíquico del niño. Denominamos a estas funciones funciones superiores, y con ello queremos significar en primer y más destacado lugar su papel en el plan del desarrollo; para distinguirla de la biogénesis con que se designa la de las funciones más inferiores, nos inclinamos a denominar a su historia de formación o desarrollo, 'sociogénesis de las funciones psíquicas superiores', resaltando así la naturaleza social de sus comienzos".

⁴ “[...] las funciones superiores de percepción, memoria, atención, movimiento y otras [...]”.

⁵ “Y ello nos enfrenta a una conclusión de gran importancia teórica. Sobre la base de la gran similitud en lo esencial que se manifiesta en su origen y desarrollo, debemos plantearnos la unidad de las funciones mentales superiores. Funciones tales como la atención voluntaria, la memoria lógica, las formas superiores de percepción y de movimiento, que hasta ahora se habían investigado por separado, como hechos psíquicos independientes, aparecen a la luz de nuestros experimentos como fenómenos esencialmente de un mismo orden: unidos en su génesis y en su estructura psíquica”.

Elkonin (1987, p. 122, our translation)⁶ organized, as follows, the periodization of development from childhood to adulthood:

If we distribute the types of children's activities, we will have to divide them into groups according to the sequence in which they become guiding activities, obtaining the following series:

direct emotional communication [...]

manipulative object activity [...]

role-play [...]

study activity [...]

personal intimate communication [...]

professional study activity

Using the propositions of Elkonin (1987), at this moment, this study emphasizes only the periods that contemplate the age of 0 to 3 years. Therefore, the periods are direct emotional communication (approximately from 0 to 1 year of age) and manipulative object activity (approximately 1 to 3 years old). It is noteworthy that periodization is associated with the socio-historical context, thus, it cannot be understood strictly.

How does periodization relate to the movement of children from 0 to 3 years of age? How does pedagogical intentionality contribute to motor awareness and the development of higher psychological functions? Seeking to answer these questions, without aiming to exhaust them, the study proposes to analyze the two periods that characterize the age group of this discussion.

In this work, it is argued that child development is linked to educational processes; in this way, the understanding of training and psychic functioning based on periodization contributes to the organization of teaching activity and to children's learning.

After birth, the baby presents a complex biological apparatus of unconditioned reflexes, which are not enough for him or her to adapt to the new conditions of life, since he or she needs adult care to survive. The relationship with the adult inaugurates his or her humanization process capable of originating the conditioned reflexes linked to perceptive organs, but this does not happen naturally; psychic development is linked to mediations on the instruments of human culture that will be provided.

Therefore, it is believed that the socio-historical and cultural conditions determine the development of the psyche. The place that the child occupies in social relations, the cultural wealth or poverty present in the coexistence with their peers and the possibility of appropriation of objectifications historically elaborated by humanity limit their objective conditions of development.

The baby, at the compatible age to attend daycare, is already able to show attention to sensory stimuli. In this way, the organization of sensory activities is a relevant factor, as he or she will perceive the body and understand the surroundings through the 5 senses. "Thus, we can say that the world, or the culture historically constituted, starts to enter the life of the individual through the sensitive ways and will constitute, day after day, their psyche" (Magalhães, 2011, p. 63, our translation). Allied to this factor, in each period of development, the individual appropriates the universe in which he or she is inserted in a peculiar way. At each moment of psychic development, there is a predominance of a type of activity capable of reorganizing and causing evolutions. However, the activity does not happen spontaneously; it is inserted in social mediations, that is, the individual who dominates the culture transmits it. At school, this relationship takes place through teaching.

In this sense, the focus of pedagogical work in the first year of life is concentrated on sensorimotor stimulation. Arce and Silva (2012, p. 179, our translation), when dealing with the stimulation of the baby, express:

The baby has a certain body rigidity that will demand attention from the teacher with the manipulation of the body, as the baby's relaxation must be aimed at. At this stage, it is important to obtain the opening of the hand by relaxing the shoulder, stimulating tactile perception [...]. As the oral language process must also be stimulated by the teacher, this type of activity can and should be accompanied by the teacher's speech, who can talk to the baby or sing to them while manipulating their body.

In this way, the sensorial stimulation accompanied by the linguistic locution that is established between the adult and the baby is a decisive factor in the formation of the expressive and communicative needs in the

⁶ "Si distribuimos los tipos de actividad infantil tienen que hemos dividido en grupos según la secuencia, en la que se convierten en actividades rectoras, obtenemos la siguiente serie: comunicación emocional directa [...]; actividad objetual manipulativa [...]; juego de roles [...]; actividad de estudio [...]; comunicación íntima personal [...]; actividad profesional de estudio [...]."

child. Elkonin (1960) emphasizes that language comprehension happens through visual stimuli organized by the adult. In this process, inserting the baby into communicative relationships requires showing attention to their body movements such as gestures and facial expressions, and responding to them through visual, tactile, and linguistic contact. Progressively, the communicative relationship becomes corresponding, thus establishing the activity of direct emotional communication.

[...] the adult ‘presents the world’ to the child, providing them with access to objects of human culture. Within the process of emotional communication, or through it, the adult presents the child with a series of objects, stimulating their manipulation, exploration, and imitation (Pasqualini & Eidt, 2016, p. 114, our translation).

The presentation of objects from the surrounding culture stimulates motor movements in the quest to reach, hold and grasp them, which enables visual-motor development. In this sense, eye movements coordinated with those of the hands represent an important condition for development, because it is a way of appropriating cultural instruments developed throughout human history. Therefore, the teacher must encourage babies to explore objects, observe and act with them, to understand that the quality, diversity, and suitability of objects interfere with child development. Thus, providing colorful objects of different sizes, shapes, and textures and with different functions favors the exploration of sensation, as well as the child’s perception.

This movement has an extraordinarily important significance for the child’s development. In the act of capture, the fundamental elements of visual-motor coordination are formed. Catching is the child’s first directed action and the origin of different manipulations with objects (Elkonin, 1960, p. 506, our translation)⁷.

The development of movement – an important factor in seeking, reaching, grasping, and acting with objects – depends on the relationships that adults establish with babies. When teachers demonstrate movements in their actions with objects and help children in their manipulations, they favor mastery of movements and interactions. “In this way, adult intervention promotes the formation of capacities to focus on the object, engendering the development of exploratory activities” (Pasqualini & Eidt, 2016, p. 119, our translation). This condition contributes to the baby progressively moving from a lying to a sitting position. Next, the child begins to crawl and then attempts to take the first steps begin. Stimulation of sensations and mastery of body movements favor perception, a higher psychological function that is central in the first year of life.

At first, the child hits the objects with the palm of the hand, then shakes them, throws them against something, and passes them from one hand to the other. Gradually, these movements come together and form a chain of repeated, varied actions with objects. Examination of objects is also developed. The child can look for a long time at the object he or she manipulates (Elkonin, 1960, p. 506, our translation)⁸.

Acting with objects, when mediated, allows the child to appropriate their characteristics and possibilities (shape, color, texture, temperature, etc.). Elkonin (1960, p. 144, our translation) defines that “[...] perception is a reflection of the set of qualities and parts of objects and phenomena of reality that act differently in the sense organs”⁹. Accordingly, perceptions and sensations result from the relationship between the sense organs and objects.

Arce and Silva (2012, p. 169, our translation) emphasize that it is important to highlight “[...] that, in the process of manipulating objects, connections are established between their different qualities that constitute the basis for the formation of the total image of the object”. Perception, as a higher psychological function, determines the individual’s ability to form images through the relationship with the world. In this way, by having the social relationships that mediate and organize actions with objects, the child’s perception is expanded.

[...] the adult presents different things for the child to contemplate; shakes, along with them, the rattle; [the adult] places the first objects in their hand to transport them; the child learns to sit up with the help of the adult; the adult supports them in their first attempts to stand up and walk, etc. (Elkonin, 1960, p. 507, our translation)¹⁰.

The author asserts that, during the first year of a child’s life, the adult organizes the child’s approach to the environment, the relationships with the elements of space, and the actions with objects. Gradually, the child starts to move consciously, modeling their motor actions in discovering the world around them.

⁷ “Este movimiento tiene una significación extraordinariamente importante para el desarrollo del niño. En el acto de coger se forman los elementos fundamentales de las coordinaciones motoras visuales. Coger es la primera acción dirigida del niño y el origen de distintas manipulaciones con los objetos”.

⁸ “Al principio el niño palmotea con su mano sobre los objetos, después los agita, los golpea contra algo y los pasa de una mano a otra. Poco a poco estos movimientos se unen unos a otros y forman una cadena de repetidas acciones variadas con los objetos. Se desarrolla también el examen de los objetos. El niño puede mirar, durante mucho tiempo, el objeto con que manipula”.

⁹ “La percepción es el reflejo del conjunto de cualidades y partes de los objetos y fenómenos de la realidad que actúan directamente sobre los órganos de los sentidos”.

¹⁰ “El adulto le trae al niño distintas cosas para que las contemple, golpea junto, con él el sonajero, coloca en su mano los primeros objetos para que los coja; el niño aprende a sentarse con ayuda del adulto, el adulto lo sostiene en sus primeros intentos de ponerse de pie y andar etc.”.

Complementing what has already been discussed, it is important to highlight that human activity has its essence defended by psychology, which determines that “[...] it is in and through activity that the psyche develops” (Tuleski & Eidt, 2016, p. 44, our translation). Leontiev (2004, our translation) highlights that the activity needs some characteristics to be dominant: the first “[...] is the form in which new types of activity appear and within which new types of activity are differentiated”; the second characteristic of dominant activity “[...] is that in which their particular psychic processes are formed or reorganized”; the last “[...] is the one on which the fundamental psychological changes in the child’s personality observed at a given stage of development most closely depend” (Leontiev, 2004, p. 311, our translation).

It should be noted here that what determines the transition from one stage of development to another is not the age of the child, since “[...] the age of transition from one stage to another depends on its content and that changes with socio-historical conditions” (Leontiev, 2004, p. 313, our translation). In this sense, it is not the biological determinations that will make the child pass from one period to another, but the content that is established according to the social and cultural conditions in which they are inserted.

Thus, depending on the socio-historical conditions in which the child finds him- or herself, at approximately 1 year of age, he or she enters early childhood; this period extends, approximately, to 3 years of life (Vygotski, 1996). At that moment, the child’s attention is no longer centered on the adult and is directed to the objects that are in their surroundings, so this dominant activity is called “[...] object manipulation activity” (Chaves & Franco, 2016, p. 112, our translation). At this moment, movement plays an important role in the child’s development, because, through it, he or she explores the surrounding environment, manipulating objects and discovering the limits of their own body.

For this reason, movement is an aspect that must be worked on by teachers during the pedagogical routine, and must be considered in their daily lives with the little ones, considering it in all care and education actions; in addition, it must be explored in all spaces of the educational center through various resources, as “[...] physical growth is favored when the child participates in continuous and progressive motor activities” (Nista-Piccolo & Moreira, 2012, p. 42, our translation).

Thus, it is pertinent to say that the child between 0 and 3 years old needs to move to develop, being, therefore, of paramount importance to carry out several activities that involve movement in this period.

We can also mention the close relationship between the motor dimension and the cognitive aspects, which require the ability to understand and think. Through the solution of motor tasks, the child improves his or her reasoning and stimulates his or her creativity. There is a huge list of motor activities that also help improve attention, concentration, memory, and understanding of rules (Nista-Piccolo & Moreira, 2012, p. 44, our translation).

Based on this excerpt, it is reaffirmed how important the movement is in early childhood and how indispensable is the intentionality of educational practice and, consequently, the teacher’s planning in this aspect. It is argued that, in order to have intentionality, it is first necessary that teachers understand its importance for the development of children. On planning that reveals intentionality with movement work, Nista-Piccolo and Moreira (2012, p. 35, our translation) defend that:

Given the importance that the movement has in the process of a child’s development, the definition of what is intended to be achieved with the proposed activities and the strategies to be used to achieve this become points of greater care in the structuring of a Child Education program. Preparing goals and tracing the paths to reach them facilitates the work and allows better recognition of the students’ development.

When the teacher performs an intentional work, all his or her educational action tends to be more qualitative, as there is systematization from planning to pedagogical practice, having an objective that guides his or her teaching action. Through qualitative work with movement, the teacher can contribute to the development of children’s potential, as it will explore their motor, affective and cognitive aspects.

Final considerations

In the course of this article, we analyze the importance of appropriation of the movement for child development and the need to provide learning opportunities based on the main activities that characterize the periods that comprise the ages between 0 and 3 years. We also encourage discussions regarding the educational intentionality in carrying out movement activities with children who are in daycare so that they achieve good development.

In order to discuss the subject and solve our objectives, we divided our study into three moments: in the first, we made some considerations from Historical-Cultural Psychology on human development; in the

second, we analyzed the importance of working with movement in early childhood and, in the third moment, we dealt with issues related to the conception of movement based on the periodization of development, emphasizing the relevance of pedagogical intentionality.

According to the considerations presented in this article, it is possible to say that, in short, movement is a very important aspect of the development of children between 0 and 3 years old and that, for this reason, it must be contemplated and carried out intentionally in educational activities of early childhood education institutions. In other words, movement is an essential factor in children's development, because, through it, little ones make countless discoveries. The smaller the child, the more body movement he or she uses to relate to the world, since it is mainly through it that young children relate socially and explore the world around them, thus acquiring new knowledge.

Since it is something so essential that, when explored, promotes child development as a whole, movement is an aspect that cannot fail to be recognized and worked with children from 0 to 3 years old. Thus, in the educational space of the daycare center, it should gain greater prominence, because, given that children do not have a fully developed language, they use their gestures, movements, and expressions to relate to the other subjects who are around them, also using their bodies to explore objects and themselves, getting to know their own body and an immensity of things that is present in the world.

Here, we argue that the body is the primary sensitive, perceptive, communicative, expressive, and relational agent. Body sensations and the language of movement include learning about motor possibilities and are related to the development of higher psychological functions. We believe that knowledge about the importance of movement in child development makes it possible to intentionalize educational proposals with a view to the corporal and psychic development of children who are in early childhood. In this sense, in pedagogical practice, movement must be considered central, to be worked with intentionality, considering the periods of children's development.

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