

# Psychomotor skills necessary for the success of young children in the 21st century

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## Introduction

The term success in the Positive Education Theory describes a state of mind in which children enjoy the activities they perform and feel that those activities are significant for them (White & Kern, 2018). The feeling of significance stems from the perception that children gradually improve in the challenges that they have taken on and that their potential for choosing new challenges continues to increase with time. Instilling the ambition for this type of success maintains the children's motivation to work and learn across time (Adler, 2017).

The physical-motor domain has many advantages in developing the potential for success. Each improvement is visible, is not necessarily dependent on the verbal sense and can improve in independent trial and error processes (Shoval et al., 2014). Improving quality of movement and extending movement challenges have no end point and they can continue throughout life. Even after a crisis – injury or illness – it is possible to begin from a relatively low starting point and gradually improve one's physical ability – that is, to succeed.

The physical-motor domain might also support learning of verbal-academic subjects. According to the embodiment theory (Loftus & Kinsella, 2022) learning ability cannot be understood without taking into account the body and its activity in the environment. Our consciousness is not an abstract thinking system, it is rather a system anchored in experiences of the body in its physical and social environment. Furthermore, the dynamic process in which cognition develops during childhood is a type of woven process in which there is coordination between the sensory-

motor system and the environment that humans create. Thus, the process changes and adapts to the children's motor and cognitive experiences and abilities. The accumulated knowledge in embodiment research has significance regarding the content and ways that learning should occur at a young age. The body should participate when learning academic subjects; to cultivate motor abilities that encourage exploration of the physical environment; to experience actual problem solving in which the body is involved, and to teach the children to trust their bodies and to use it for learning (Mavilidi et al., 2021).

What are the components of teaching and learning that enable the potential for success to be achieved in the motor field and thus in other fields as well? In other words, which motor abilities are necessary for young children in order to succeed?

Providing opportunities to move freely in an environment that encourages movement, without intervention and guidance of the educators is important for encouraging independence. However, it is not sufficient for remaining active for a long period of time, or for in-depth learning (Bower et al., 2008; Krombholz, 2012). Conversely, teaching specific motor skills when the aim is to control them according to clear criteria, promotes motor learning, but may hinder the progress of some children in relation to criteria, and lead to a feeling of defeat. In this chapter we will present a middle way.

There are two types of psychomotor skills that might promote success because they allow for independence and simultaneously present learning steps that improve psychomotor abilities. One is the acquisition of meta-motor skills that provide a basis for continuity of motor learning. The

second, enhancement of abilities that are common to movement on the physical as well as other domains: personal- emotional i.e. self-direction; social such as the ability to socialize and move with others; and cognitive, such as the ability to acquire information and exercise creativity, which enables significant learning.

### **Acquisition of meta-motor abilities that enable success**

Meta-motor abilities are a collection of neuromuscular skills that underlie every movement and every motor skill. Childhood is a significant window of opportunity for motor learning. Acquisition of meta-abilities is dependent not only on biological processes, but also on learning through experience. Thus, without varied experiences in movement, the level of development will be lower and will also harm the ability to acquire skills at more advanced ages (Benda et al., 2021; Collins & McDougale, 2021; Patel et al., 2020).

The research literature notes four meta-motor abilities: motor coordination, balance, transfer processes (Hill et al., 2018) and attentiveness to the body and to movement (Bacon, 2017; Weare, 2019). The aspiration to improve these four meta-motor abilities shows that children have different and diverse abilities that continuously develop on a personal continuum and simultaneously promote the learning of necessary motor skills.

#### *Improving motor coordination*

Motor coordination is the harmonious function of various limbs that focus on one goal in the most efficient manner. This function is possible via the neuromuscular system. The ability for coordinated movement enables the development of continuously improving movement patterns for the achievement of desired results (Schmidt et al., 2019).

Motor coordination includes two types of coordination – coordination between neuromuscular systems, that is coordination within the kinesthetic perception via proprioceptors. For example, jumping in place or transferring weight from legs to hands. The second

type – coordination between the kinesthetic perception via proprioceptors and other systems of perception via various senses, mainly vision and hearing. For example, target shooting. The visual perception provides information regarding the location of the target, its size and the distance from the shooter, and the movement translate these data to the appropriate measure of force control and direction. Dance is another example of coordination between auditory perception and kinesthetic perception. Auditory perception provides information on the rhythm of the melody, and the rhythm of movement is guided by this information (Alexandru Szabo et al., 2020; Wang & Agius, 2018).

Motor coordination can be further delineated: A. Gross motor coordination – which involves large body muscles used for goal-directed motor behaviors and activation of objects (Williams & Monsma, 2007). It develops sequentially during developmental years, while early childhood presents a significant window of opportunity for its development (Lima et al., 2017). The improvement that children experience through practice in motor coordination is a prerequisite for children to experience a sense of competence (Peers et al., 2020). B. Fine motor coordination – which involves small body muscles in movements that require functioning of the fingers for operating objects (Gallahue et al., 2012), such as stringing beads, playing the piano or typing on the computer, drawing and writing.

Though each of these types of motor coordination receives commands from different areas of the brain, and there is no correlation in the development of the movements (Cameron et al., 2012; Davis et al., 2011), it is difficult to perform fine motor movements without the involvement of gross motor movements. For example, when putting on pants (gross motor) one must grasp the pants (fine motor), stabilize the body and bend in the appropriate direction, lift a leg, lower it to the floor and repeat the gross motor coordination on the opposite side. An additional example is drawing and writing, perceived as fine motor coordination, however control requires skills of gross motor coordination, such as holding the page so that it does not move from its place, holding the hand and body in a manner that allows the painter

and the writer to see the results of his work and positioning the shoulder blades to allow precision of hand movements.

Thus, motor coordination is a meta-motor ability that provides the basis for motor skills, and is essential for optimal movement. During childhood, when this system begins to mature, continuous improvement is made possible through learning and much practice (Čillík & Willwéber, 2018). The continuous improvement impacts a sense of success and self-efficacy (Peers et al., 2020). Planned learning aimed at improving motor coordination in line with the needs and abilities of each girl and boy builds a significant basis for motor transfer that will be discussed henceforth.

### *Improving balance*

Body balance is a type of motor coordination in which vision sensors and motion are connected to balance sensors that are located in the middle ear, in order to maintain body balance, without superfluous movement and without falling (Goddard et al., 2017). Balance sensors are the last to develop owing to the complexity of the system, their dependence on other sensory systems and the need for much training through movement in order to relieve its dependence on visual perception.

Body balance is dependent on external factors that include the base of support, the center of gravity, body structure and weight and their synchronization (Davlin 2004). People in motion can choose their base of support, its size and the way that the body organizes itself on it, and can move while maintaining balance (Paillard & Noé, 2006). It is assumed that the complex requirements of the system for effective movement explain the slow development of balance during early childhood. Thus, the importance of practice in movement which can only be achieved through encouragement and guidance of adults who are close to the to the children (Frick & Möhring, 2016).

The balance system is indeed part of the motor coordination system, however it has special importance in the study of human movement for several reasons: First, balance has a significant role in maintaining a balanced posture (Hof, 2008) and its ability to perform each of the basic movements (Haddad et al., 2012; Frick &

Möhring, 2016). Second, the ability to balance develops slowly across time, beyond the period of motor development, which is a connecting point for cognitive processes of attention, concentration (Taube et al., 2015) and executive functions (Hudson et al., 2021). Similarly, researchers link delay in movement based on the ability to maintain balance and the activation of mental imagery (Guarnera et al., 2017). According to the researchers, during a delay in movement or activation of the body, wherein the kinesthetic perception and movement response is halted, a thinking action continues the mental image of the movement (Hanakawa, 2016). Third, there is a correlation between the ability to balance the body and the desire to challenge it, and emotional states such as a sense of self-efficacy and even depression and anxiety (Mirelman et al., 2011).

There are two types of balance: static balance and dynamic balance. Static balance is when the center of gravity is maintained vertically above the base in a certain position, without changing the base across time (Rogers et al, 2001). Dynamic balance is when the center of gravity is maintained above the base in motion, when the body leaves the center of gravity (Hatzitaki et al., 2002). The more difficult the external data for maintaining balance, the smaller the support base, more slanted, less stable, higher center of gravity – thus the challenge of maintaining static and dynamic balance is greater (Haddad et al., 2012).

It can be said that balance is a meta-ability that is based on the principles of motor coordination ability, which also underlies every movement and is the basis for transfer processes. The development of optimal balance depends of the planned training processes (Shoval et al., 2015; Gebel et al., 2018), that enables every boy and girl to develop in the manner and order appropriate for them and thus to experience a sense of success.

### *Enhancing transfer ability*

Learning a new skill is a process of adapting to new conditions or new requirements. It is based on the ability to transfer existing motor knowledge to new motor knowledge. The transfer is based on the fact that the existing ability and the new movement have a common denominator. The broader the common denominator, the closer and

easier the transfer is to achieve. The narrower the common denominator, the transfer is considered farther and more difficult to achieve (Seifert et al., 2018).

Hill et al., (2018) examined the type of motor learning necessary for humans in the 21<sup>st</sup> century and noted that this meta-ability should be cultivated because it enables adaptation to continuously evolving conditions. Robots can learn repetitive movements or planned movements ahead of time, but they still cannot perform flexible and far-reaching transfer in accord with changing and often unpredictable needs. The more children train to enhance motor coordination and balance, the greater the chance for transfer. This is on two levels. One, transfer of experiences, and the second, reduction of the gap for transferring familiar skills to new skills – the greater the repertoire and variety of movements, the greater the chance that a substantial part of the learning has already taken place.

It can be said that transfer ability is the intersection that links early childhood with continued movement training and improvement. This is what enables early childhood, the age when motor coordination and balance significantly develop, to sense success throughout learning.

#### *Improving the ability to be attentive to the body and to movement*

Attentiveness is activation of the human ability to identify our own movement, although we don't see the movement in its entirety. Identification of our own movement occurs via referring our attention to what is happening in our bodily muscles and joints (Andersen & Stolpe, 2018). The main auxiliary tool for listening is mental imagery, which is actually the ability to picture movement as a portrayal in memory (Taube et al., 2015). Young children are able to listen to their bodies if they are guided to do so (Flook et al., 2010).

Attentiveness does not occur as a matter of course, rather, following a decision to direct attention to the movement. The need for a specific conscious decision is based on several factors: One, most movements in daily life are automatic repetitive movements performed independent of conscious processes. Second, most of our movements (even

the non-automatic ones) aim to achieve goals, such as moving an object from place to place, passing over an obstacle, reaching a different location to change activities, and so on. Third, because movement is exposed to the surroundings, often the attention of those moving is directed towards social processes that are taking place.

Attentiveness allows those who are moving to recognize their abilities and their limits. This attentiveness, at an early age, before children's judgement is directed towards themselves, is important for cultivating an appropriate and positive perception of self-efficacy that enables the choice of a less familiar movement and practicing it until succeeding (Flook et al., 2015). If the ability to transfer is the intersection between psychomotor skills and learning and external functions, attentiveness is the intersection between motor experiencing and the boy's and girl's recognition of their own abilities. The process of becoming attentive involves experiencing relaxation, which in itself is regulation of strength and motor coordination concurrent with a personal-emotional process of distancing from tension that harms learning and wellbeing (Coss, 2021). Achievement of the capacity for attentiveness is a tool that might help the learners throughout their lives.

In relation to the meta-motor abilities there are four abilities for maintaining success. Two meta-abilities, motor coordination and balance, are necessary for movement and skills and are the basis for enhancing the abilities to transfer. The ability to listen to the movement allows recognition of the process of ongoing improvement. A combination of these four capabilities conceals the possibility of the individual to successfully learn and recognize this success in a way that will benefit learners in the future.

#### **Enhancing the abilities common to physical movement and other human domains**

The knowledge that learning does not occur as abstract thinking, but rather as a system anchored in experiences of the body in the physical and human environment leads the search for points of connection between movement and learning. This

means that psycho-motor abilities that can be significantly developed at a young age can help improve well-being in daily life at school.

Four psychomotor skills will be discussed: the ability to obtain movement information that illustrates what is being learned; the ability to realize creativity that combines mainly motor processes with cognitive processes; the ability to control self-regulation processes in learning, that combine mainly personal-emotional processes; and the ability to work with others that incorporate social processes.

*The ability to obtain kinesthetic information that illustrates what is being learned*

A review of the curricula of kindergarten and elementary schools reveals that most subjects are dependent on concrete-perceptive information. Educators for young ages are aware of the role of tactile, visual and audio perception, however they tend to ignore perceptions that are dependent on movement – kinesthetic perception, vestibular perception and crude touch perception.

Information from kinesthetic perception, obtained through experience in movement is a significant demonstration. Thus, for example, when children learn to write letters with the help of full body movement and the entire arm, they learn to

identify letters, the quality of their writing is better and the direction of writing is clear for them. After these develop, the kinesthetic perception of the fine motor-coordination system of the fingers takes over to allow for writing fluency (Bara & Bonneton-Botté, 2017).

Skulmowski & Rey (2018) analyzed over one hundred articles dealing with the relation between movement and learning, from the point of view bodily engagement, and proposed a taxonomy that allows for evaluating the contribution of motor tasks on academic learning in two domains (Figure 1). The first domain is integration of a motor task in academical learning. The more that motor task is integrated in verbal-academic task, the greater the contribution to higher learning; the more coincidental and casual, the less opportunity for learning. The second domain is the degree of physical involvement. The more bodily movement performed, the more perceptual information the movement provides and the contribution to learning is greater, and vice versa. The upper right cell expresses the highest level of opportunities to activate the information processing system for the purpose of academic learning. The lower left cell expresses the lowest level of opportunities for activating information processing.

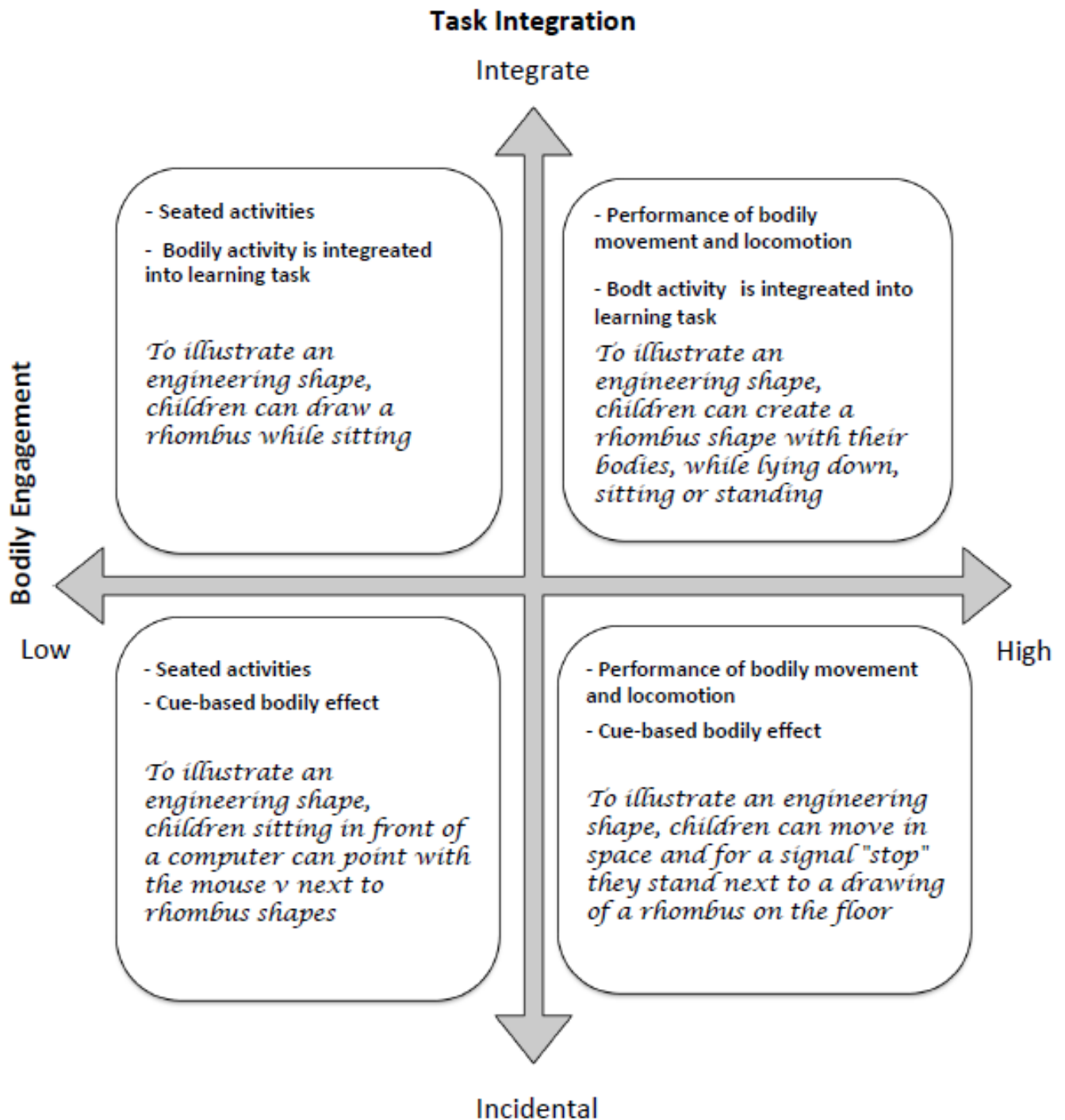


Fig. 1: The 2 × 2 taxonomy of embodiment in education

The potential for psychomotor ability to use the body and movement to collect information about reality depends on the ability to take advantage of the information received for learning purposes.

This ability develops through much experience in the transition from movement to verbalization and back to movement (Shoval, 2011). These transitions simultaneously enrich the trove and

awareness of movements as well as the communication and language. This is all in accord with the children's choices and their abilities to express themselves, which ensures a sense of success, especially for those whose motor abilities are greater than their verbal abilities (Shoval & Shulruf, 2011). This process may appear in various activities – in school and outside of school: in classes, during recess, in movement games; at the playground, while taking tabletop game down from the box shelf, etc.

#### *The ability to realize children's inherent creativity*

Creativity is the ability of individuals to develop something new that has value for the individual, and at advanced stages – also for society. Creativity in learning requires initiative; it develops cognitive processes, enables understanding of science and art, and opens the world to experiences that enrich life (Kirkham & Kidd, 2017).

At a younger age, children find it easier to experience creative processes in movement for two main reasons: First, at a young age, children do not yet have defined movements and skills, and are still able to give expression to their creative abilities that allow them freedom of movement (Aras, 2016). The second reason, the verbal dimension at that age is still not advanced enough to enable creativity using language, as for other domains of expression such as visual arts and music. That is, movement is the most developed channel through which most young children can express their creativity and initiative (Cheung, 2010).

Enhancing the ability to realize creativity in movement occurs in three ways. First, when children move in a physical environment and climate that allow the expression of emotions and realization of freedom of choice with no direct intervention by adults (Kirkham & Kidd, 2017). Second, when the instructions given for movement or games are open to various solutions (Richard et al., 2018). Third, when the components of the movement are based on principles similar to those of Laban, that deal with space, time and strength and can be assembled and disassembled in countless ways, according to personal needs (Sansom, 2011).

Movement enables three directions of creativity. One, associative creativity – which enriches a variety of movements, improves transition from movement to movement, and is expressed in experiences such as the search for various ways to connect the palm of the hand to the foot, or composing a movement connection (Sansom, 2011). The second direction concerns creativity in which emotions are expressed. Movement of this type can be a response expressed as a movement theatre in which it is possible for example, to express increasing anger via changes in strength invested, or an expression of despair via changes in posture (Koff, 2000). The third direction relates to logical-scientific creativity (Watson et al., 2017), expressed by investigative questions such as: why does our movement create a circle or part of a circle? How much strength should be invested so that marbles in the slot of a lid will go around without leaving the slot? The first two types of creativity are personal and give an opportunity for personal expression without comparison to other children. The third type – creativity in investigative questions – depends on the way the questions are constructed. If each child or group of children could choose the logical-scientific questions, then this type would also be personal. If the teacher chooses the questions, it is important to allow personal-independent processes of solution in terms of duration of time and modes of solution.

The potential of psychomotor ability to use the body and movement for the benefit of creativity depends on the opportunities offered the children to initiate movement and games and to interpret the tasks in their own ways. Especially for young children, it is easier to present their own ideas, since they are not restricted by specific motor skills, but rather are free to create – and thus, succeed.

#### *The ability to control self-regulation learning*

Self-regulated learning is the ability to initiate learning processes independently and consciously, to persist and to supervise the process with meta-cognitive thinking. Learners with ability for self-regulation succeed in establishing goals, plan how to achieve them using cognitive strategies, and implement processes for achieving goals with internal motivation, and then assess their progress

(Boekaerts & Cascallar, 2006; Schraw et al., 2006). Observations in kindergartens identified that when children lack knowledge of efficient processes for self-regulation, they tend to avoid or quit educational activities, to use ineffective strategies, to set easy goals that do not present a challenge, and do not ask for help when they need it (Schunk, 2005). While practicing movements, two central actions of self-regulation can improve perseverance and independence.

*Movement and perseverance in learning.* When movement is subjected to a learning task, it allows for remaining in a task for two reasons. One, the body movement allows transition between external processes and internal processes, and thus opens opportunities to explore using trial and error. For example, if we ask a girl for a verbal explanation for the difference between a ball and a cylinder, we will receive one answer that seems right to her (Ruiter et al., 2015). If we ask the same girl to compare a ball to a cylinder through a movement that activates those objects, she would be able to conduct an external exploration and try various options. The second reason, body movement gives rise to and increases attention. Physical activity contributes to the increase of blood flow and oxygen supply to the brain, increases its function and maintains arousal of the nervous system (Cacciotti et al., 2015). Any change in the level of arousal that occurs following a change in movement reawakens attention to the cognitive task. The ongoing renewal extends the time spent on the task (Humphrey, 2012).

*Movement and independent learning.* Independent learning means that learners make decisions and execute them by personal choice, independent of direct interaction with teachers. The independent learners know where they need to ask for help, where they made mistakes and where they should correct and make changes and adjustments in accord with the accomplishment they want to achieve (Svinicki, 2010).

Movement provides an opportunity for independent learning by reducing the dependence on previous information. The reduction of dependence on previous information is made possible thanks to the information that the movement provides in real time (Ehrlich et al.,

2006; Ping & Goldin-Meadow, 2010). We will demonstrate the idea with the following task: “Explain the difference between the system of directions: left, right, forward, backward and the system of directions: door, window, blackboard, doll corner. The attempt to deal with the question verbally depends on prior knowledge regarding the existence of objective and subjective directions. In contrast, experience in walking in the various directions serves as a structure for an independent encounter that enables the children to experience the difference.

Movement during learning facilitates initiative, because the learners can determine the initial level and content appropriate for their character and talents. After the boys and girls experience the movements, new learning opportunities that encourage them to continue to initiate, open up (Tomporowski et al., 2015). For example, the task to distinguish the difference between “flexible” and “rigid” through actual experience with three objects: stick, rope, and rubber-band. The learners are asked to lift each of the objects or move them from their places, to identify the differences while examining the concepts “flexible” and “rigid”. Each boy and girl can perform the task in their own way, in the order and complexity that they choose, and decide on the level of involvement of their body. After the experience, each learner draws conclusions based on the parameters for comparison that they encountered while moving.

The potential of the psychomotor ability to use the body for the benefit of self-regulation that includes perseverance and independence is dependent on: considerable experience in choosing achievement goals, planning options for achieving the goals; the ability to evaluate achievement of the goals, and with the help of that evaluation to set new goals that are appropriate for the learner. The children need to learn to choose their goals according to their ability and character. After they have learned, their chances for success are high.

*The ability to work together with others*

Movement of the body generally occurs in open spaces and social situations. Even when the child chooses a movement for himself and ignores the others, he is still exposed to his friends who are



also moving near him in the same area. The dependence on others is especially high in group games, in which movements coordinate social processes of close contact and reciprocal competitive and cooperative interactions.

Physical activity includes non-verbal communication characterized by spontaneity and unspoken valuable messages (Taylor & Owen, 2021). For example, children who are holding hands during a game or a dance – when the grip is too strong, the message is of control or anxiety, when the grip is too weak, the message is of insecurity. Thus, activity in the physical space becomes a social experience that can be positive or negative, according to the types of movements of the participants.

Physical activity requires involvement and effort from the participants and often also requires initiative. It is impossible to move and remain indifferent to what is happening in the environment of the activity (Sando et al., 2021). In order to understand this, we will compare two situations: One – several children are playing, each one separately, in the same playground. The second, children who are listening, each one separately, to the teacher telling a story. During movement on the playground, the children must be aware of what is happening around them: they need to adapt themselves to the others in order to reach their goals, and to watch out for the other children in the playground to avoid hurting them and to avoid getting hurt, they should use the playground facilities properly. In contrast, during passive listening, the children need not relate to others.

Physical activity creates a dependence of each one of the participants on the other. Exposure of physical activity and the fact that everyone sees everyone else creates a situation of dependence. While the physical activity is taking place, there are various levels of dependence (Shoval, 2011): beginning with a low level of dependence – each person knows what his friends are doing, to high levels of dependence – one climbs the wall to retrieve a ball that fell behind it, by standing on his/her friends' joined hands.

The potential of psychomotor ability to use the body and motion for joint activity with others is

dependent on considerable experience in the process of movement with others and with learning how to take others into account, giving and receiving help. This is all within a framework of rules that create equal opportunities for all participants and that allows for a positive experience and joint successes.

### **Summary and transition to implementation**

Psychomotor abilities that are detailed here are the basis for success throughout life. They are not acquired on their own, as part of development or by incidental exercise. Rather, they must be learned through a daily methodical plan, with experiences of success. The experience of success is created from a combination of many repeat exercises and is consistently refined by cultivating the processes of personal choices, within the limits of what is possible. Without varied experiences in movement, the level of development and success are low and also impairs the ability to improve motor skills at more advanced ages (Benda et al., 2021; Collins & McDougale, 2021; Patel et al., 2020). Similarly, it has been proven that teaching planned physical education significantly improves psychomotor abilities in comparison to the absence of planned instruction (Fjørtoft et al., 2009; Golden, et al., 2018).

The teaching designed to achieve success occurs in two main ways; one is through creating an environment that encourages movement in which children move as they choose. The educators construct the environment in a manner that is diverse in terms of psychomotor skills, adapted to the amplitude of the abilities of the children, and changes according to their progress. When the children work in an environment that was prepared for them the educators observe the children identifying their choices and their successes and giving their feedback in a manner that provides the framework for the next experience (Shoval et al., 2015). The second way is done through lessons in which open instructions are given that allow for many solutions, and the children are offered choices for solutions that suit them (Gigih et al., 2017).

The main advantage of the first method – building an environment that encourages movement – gives the children freedom of choice. The younger the age at which this method is initiated, the less dependent the children will be for having their successes defined by others. The disadvantage of this method is the demand from the teachers to respond to the children's behaviors and to give them accurate feedback that will be a framework to guarantee future success. Much professionalism is required for this process in the motor domain and in the field of giving feedback. The main benefit of the second method – providing open instructions for movement – is that the teachers have control over the teaching-learning process and they can prepare in advance. The disadvantage of the second method is that the teachers control the pace of transition from instruction to instruction and that may impair free choice.

Research evidence shows a link between planned and directed teaching and improved motor ability in early childhood. Thus, it was found that the duration of time that children are active has much significance: The more time that children spend in an activity, the more they continue to improve (Krombholz, 2012). In addition, it was found that in kindergartens where there was planning and intervention by the teacher, the children participated in physical activities an average of 80 minutes per week more than in kindergartens where there was no planning or involvement of the teacher. It was also found that in kindergartens that supported movement, sedentary behaviors were reduced by an average of 140 minutes per week (Bower et al., 2008).

The four common abilities for movement in the physical domain and in additional human domains need to be cultivated in verbal academic lessons and in physical education lessons in cooperation between teachers of academic subjects and physical education teachers. Physical education teachers can use the question how much force is necessary to roll a ball so that it enters a hole in the ground from various distances on smooth and rough surfaces. When the children learn about force-distance-and time in science class they can try it out by coordinating fine motor movement on

the table and by repeating what was done in physical education classes.

During this learning the teachers can lead the experience towards acquiring the tools for success. For example, it is possible to gear the learning to realize the creativity inherent in children, to allow them to choose and to place various surfaces and objects to roll, at different starting positions. It is also possible to lead the experience towards self-direction where the children choose an object that can be rolled on a suitable surface, and choose their own goal, practice, achieving and realizing it over time.

In this article we built a thought framework for the question: Which motor abilities are necessary for young children in order for them to succeed during learning and in life? The methods of teaching necessary for achieving these skills have a decisive role in reaching success. However we did not devote an organized and detailed process owing to the brevity of the work. The starting point for enabling children a life of wellbeing in which one of the basic conditions is a sense of success, changes the choice of goals and content learned in physical education classes, in academic lessons and in classes that combine physical education and academic learning. An intervention program that focusses on the psychomotor skills necessary for success should be developed and the impact of that program should be studied.

### Disclosure statement

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