# 141 - COMPARISON OF THE PSYCHOMOTOR PROFILE BETWEEN CHILDREN OF 4 AND 5 YEARS OLD FROM 2 PRIVATE SCHOOLS

PATRÍCIA ESPÍNDOLA MOTA VENÂNCIO, MAURA LÚCIA BRAGA UniEVANGÉLICA-Anápolis-GO-Brazil. LAFE-Laboratory of Physical Evaluation of the Evangelical. CATHOLIC UNIVERSITY OF BRASÍLIA -UCB Venanciopatricia@yahoo.com.br

## Introduction

When we watch children from the same ages playing freely, or inside their classroom, with simple and complex activities, we can see that there are many differences among them, both on their intellectual and motor parts. As an example, if we put a ball for many children to play with, there will be motor answers in many ways, some will be more quick and clever, some other might be clumsy, and some won't even play with the ball. In situations where there are rules and limitations, some children will understand them quickly and get well defined notions of space and time, but some other children can't get what is being proposed, even if they have a normal intelligence.

Children who have difficulties in reading and writing are soon named as disinterested and lazy, and this can lead them to serious psychological problems, for the rest of their lives (OLIVEIRA, 2002).

As Vygotsky (1998), the individual establishes criteria in agreement to the life's experience, being this negative or positive. Then, he/she starts to develop a propitious or not opinion about himself/herself, or, there is a development of a judgment capacity. So, he/she uses a series of references for the self-realization and starts to deal with self-stem.

When analyzing the importance of motoricity upon the psychological development of a child, Fonseca (1998) verified that the movement evolves a previous taken of conscience. Before the existence of the action, there is an objective thought to be reached, and that needs a motor act.

The links between spacial structuration, time orientation, laterality, scholarship difficulties for children who have normal intelligence are studied. With the psychomotor education, the physical education starts to have as a main purpose to motivate the practice of the movement in every part of a child's life. Today, the psychomotoricity and through-action relation, is a taken of conscience, that unites: the body being, the mind being, the spirit being, the nature being and the society being of a child (MOLINARI; SINS, 2003).

Considering that many children don't have enough space to play and to interact with the environment, and with other children, the great technologic evolution also contributes for the existence of non-coordinated and clumsy people. So, when they are called to play, they don't answer or have bad evidence upon them. In front of these facts, physical education teachers might be able to awake a greater interest in these children, using appropriate exercises to the development of the psychomotor coordination in pre-school, and making the teaching-learning process easier and efficient.

#### **General Objective**

To identify the deficiency in the psychomotor areas in children of 4 and 5 years old, to verify if the physical education when directed to the psychomotoricity may offer possibilities of success.

#### Specific objectives

•to analyze the psychomotor profile of 4 and 5-years old children;

- •to compare the difference between the psychomotor profiles of the children from 2 schools;
- •to verify the difference between genders.

#### Methods

The research is a transverse study and it was realized in the city of Anápolis-Goiás in 2 private schools. The total of the valuated children was of 31 (of 4 and 5 years old), from both genders, 19 boys and 12 girls. In the first school, there were 8 boys and 8 girls. On the second school, there were 11 boys and 4 girls. In one of the schools, the physical education children worked upon the children's psychomotoricity once a week, during 45 minutes. On the other school, there wasn't any kind of classes or work.

As a valuation instrument, the Psychomotor Battery (PMB) of Fonseca (1995) was used, to study the psychomotor profile of the child.

The PMB is a battery of observation that allows the teacher to watch many components of the psychomotor behavior of the child, in a structured way.

The PMB is composed of seven psychomotor factors: tonicity, equilibration, lateralization, body notions, space-time structuration, global praxis and thin praxis, divided between 26 factors:

•Tonicity: neuromuscular acquisitions, tactile comfort and motor patterns integration (from birth to 12 months of age);

•Equilibration: acquiring of biped posture, gravitational security, development of locomotion patterns (from 12 months to 2 years of age);

•Lateralization: sensorial integration, emotional assault, development of diffuse perceptions and of the afferent and efferent systems;

•Body notions: notion of ME, body conscience, body perception, imitation conducts (from 3 to 4 years of age);

•Time-space structures: development of selective attention, information processing, body-space coordination, language proficiency (from 4 to 5 years old);

•Global praxis: spyglass-manual and spyglass-pedal coordination, motor planification, rhythmic integration (from 5 to 6 years of age);

•Thin praxis: concentration, organization, hemispherical specialization (from 6 to 7 years).

The factors are valuated in agreement to quotation from 1 to 4:

4 Excellent, hyperpraxis profile: perfect realization, precise, economic and easy to control (excellent, great; objectively easily learning).

3 good, eupraxic profile: complete appropriated and controlled realization (good; no-distinguished dysfunctions, not objectivating learning difficulties).

2 Satisfactory, dispraxic profile: weak realization with control difficulties and deviation signs (weak; unsatisfying; quick dysfunctions. Objectivating learning difficulties).

1 Weak, apraxis profile: absence of answer, unperfect realization, uncompleted, inappropriate and not- coordinated (very weak and weak; obvious dysfunctions; significant learning difficulties).

#### Result

The average age of the children was of 4, 81 in the school 1 and 4, 67 in the school 2.

The equilibration had the best result between children from both schools and the thin praxis had the lowest quotation from both schools.

The only factor that didn't have the same order was the laterality, getting the 6th place from 1 to 7, in the first school and in 2th place in the school 2.

The quotation is given of 4 to 1.

Comparison between the 2 schools, in all factors of the PMB:

	Psychomotor Areas and your quotations									
Schools	Tonicity	Equilibration	Lateralization	Body	Time-space	Global	Thin			
	-	-		notions	structures	praxis	praxis			
Schools 1	3,56	3,81	2,75	3,50	3,31	3,25	2,50			
Schools 2	2,53	3,27	2,67	2,60	1,87	2,13	1,73			
Chart 1: Comparison among the 2 schools, in all the factors of BPM (Psychomotor Battery)										

Legend: 1 – School that works psychomotoricity;

2 – School that doesn't work psychomotoricity.

The most significant differences were observed in tonicity, body notions, space-time structuration, global praxis and thin praxis. The space-time structuration had the biggest difference on both schools.

Regarding Sex, the laterality was the one who had a significant difference. The boys had a better position than girls. On the other factors, girls were better, as the chart shows:

	Psychomotor Areas and your quotations										
	Ν	Tonicity	Equilibration	Lateralization	Body	Time-space	Global	Thin			
					notions	structures	praxis	praxis			
Boy	19	2,84	3,53	3,00	3,00	2,53	2,63	2,00			
Girls	12	3,42	3,58	2,25	3,17	2,75	2,83	2,33			

Chart 2: Differences among boys and girls in all factors of PMB

# Discussion

In a study made by Fávero and Calsa (2003), with the objective of look for a relation between the dysgraphia and psychomotoricity, they could see that the students who didn't participate of the suggested activities and who had reading and writing problems weren't in a psychomotor profile similar to their chronological age.

Molinari and Sens (2003) suggest a physical education work on pre-school based on the child's needs, once that by this psychomotor education, it would be reached a global development of the child, through the movement, the action, the experience and creativity, so the child can meet with objects and gradually distinguishes its shapes. It makes that the child take conscience of the relations he/she has with space and time, making reality true (MENDES; MENDES; PONTES, 2006).

The same authors above say that the psychomotor education on preschooler's acts as preventive for future unnadaptations that might make alphabetization more difficult, once this one depends on the satisfying development of the psychomotor areas. The suggested activities for preschoolers are those that develop on their totality, and they must occur spontaneously during the physical education classes, so they can participate with pleasure and enthusiasm, exploring the entire environment and the objects that surround the child. So, they can create an affective relation between teacher and student, student-student and student-teacher, keeping the preconception away from the inter-relations in school.

Observing the learning problems that may occur, in relation to the bad lateralization of children, Ferreira (2006), say that dyslexia is a problem that may be identified on reading and orthography, as letter changing, read from back to forward, don't be capable of spelling. The disortography is the difficulty of memorizing orthographic rules, writing words in a wrong way. The dyscalculia is the difficulty over calculation upon symbols identification, and it's in a certain way, relationed to the lateralization and to the body structures system. The author says that "laterality is one of the aspects most important for the learning capacities and that a well structured physical education might propose a global and harmonic development of the child, searching to develop potentialities and to help on learning process. On this program there should have activities and directed exercises to the affirmation of laterality, static and dynamic coordination, equilibrium, movement's dissociation, time perception, relaxing and small games.

#### Conclusion

It can be concluded that in the school where children have physical education classes, which concentrate on their psychomotor development, are much better in all the factors from the PMB of Fonseca, 1995, than the other children who doesn't have on their schools these kinds of physical education classes.

So, the physical education, with its possibilities of developing the people's psychomotor dimensions, especially in kids, and together with its cognition and social domains, has a great and big importance upon the preschoolers learning.

# Bibliographical References

FAVERO, M. T. Martins, CALSA, G. Carolina. **As Razões do Corpo**: Psicomotricidade e Disgrafia. I Encontro Paranaense de Psicopedagogia ABPppr.2003.

FERREIRA, Heraldo Simões. Psicomotricidade ou Educação Física? Romeu e Julieta ou Montecchio e Capuleto? Lecturas: Educación Física y Deportes, Buenos Aires, v. 11, n. 101, oct. 2006.

FONSECA, Vitor. Manual de observação Psicomotora: Significação psiconeurologica dos fatores psicomotores. Porto Alegre: Artes Médicas, 1995.

FONSECA, Vitor. **Psicomotricidade: Filogênese, Ontogênese e Retrogênese**. 2. ed. Porto Alegre: Artes Médicas, 1998.

MENDES, Ana Maria Meireles de Pontes; MENDES, Manuel Ubiramar de Lima; PONTES, Luciano Meireles de. Psicomotricidade: uma prática pedagógica de ajuda no desenvolvimento afetivo-social de portadores de necessidade especiais a partir das aulas de Educação Física. In: FONTOURA, Paula (Org.). **Pesquisa em Educação Física**. v. 4. Jundiaí: Fontoura, 2006. p. 227-231.

MOLINARI, A. Maria da Paz, SENS, Solange Mari. A Educação Física e sua Relação com a Psicomotricidade. **Revista Pec**, Curitiba, 2003.

OLIVEIRA, Gislene de Campos, **Psicomotricidade: Educação e Reeducação um enfoque Psicopedagógico**. 7. ed.. Rio de Janeiro: vozes, 2002.

VIGOSKI, L. Semenavich. A formação social da mente. 6. ed.. São Paulo: Fontes, 1998.

Av. Presidente Wilson Edif. Morumbi, Bolco A. Aptº 404 Jundiaí Industrial CEP: 75115100, Telefone: (62)33149104 -

#### Anápolis-GO-Brazil. venanciopatricia@yahoo.com.br

### COMPARAÇÃO DO PERFIL PSICOMOTOR ENTRE CRIANÇAS DE 4 E 5 ANOS EM 02 COLÉGIOS PARTICULARES

O presente estudo verificou o desenvolvimento psicomotor de crianças entre 4 e 5 anos de idade de ambos os sexos, em 2 colégios particulares, o colégio 1 desenvolveu um trabalho psicomotor com as crianças em aulas de educação física, uma vez por semana; o colégio 2 não tinha aula de educação física inserida na pré-escola. Identificar os déficits nas áreas psicomotoras em crianças de 4 e 5 anos de idade a fim de verificar se a educação física direcionada a psicomotricidade oferece grandes possibilidades de sucesso. A pesquisa é do tipo transversal e foi realizada na cidade de Anápolis-Goiás em 02 Colégios Particulares. O total de crianças avaliadas foram 31 (entre 4 e 5 anos), de ambos os sexos, 19 meninos e 12 meninas. Sendo 8 meninos e 8 meninas no primeiro colégio e 11 meninos e 04 meninas no segundo colégio. Onde um colégio, a professora de Educação Física trabalhava a psicomotricidade em aulas específicas uma vez por semana, durante 45 minutos e no outro colégio não existia nenhum trabalho dessa espécie. O colégio 1 obteve melhor desempenho do que o colégio 2 em todos os fatores da bateria, que são: tonicidade, equilibração, lateralização, noção do corpo, estruturação espaço-temporal, praxia global e praxia fina. Pode-se concluir que o colégio onde as crianças têm aulas uma vez por semana de Educação Física onde de centra nos desenvolvimentos das áreas psicomotoras, estão à frente em todos os fatores da BPM (bateria psicomotora) de Fonseca, 1995, do que as crianças que não tem no colégio este trabalho psicomotor. Assim, a educação física pelas suas possibilidades de desenvolver a dimensão psicomotora das pessoas, principalmente em crianças é de grande importância no ensino pré-escolar.

Palavras-chave: Bateria psicomotora; colégios; crianças; perfil psicomotor.

# COMPARISON OF THE PSYCHOMOTOR PROFILE BETWEEN CHILDREN FROM 4 TO 5 YEARS OLD IN 2 PRIVATE SCHOOLS

This research verified the psychomotor development from 4 to 5 years old in both genders, from 2 private schools. The first school developed a psychomotor work with the children in physical education classes, once a week; the second school didn't have any physical education classes inserted on preschoolers. To identify the deficiencies in psychomotor areas in children from 4 to 5 years old, with the objective to verify if the physical education directed to psychomotoricity offers great possibilities of success. The research is a transverse one, and it was realized in the city of Anápolis-GO, in two private schools. The totality of valuated children was 31 (from 4 to 5 years of age), from genders, 19 boys and 12 girls. There were 8 boys and 8 girls on the first school and 11 boys and 4 girls on the second school. In one of the schools, the physical education teacher worked the psychomotoricity in specific classes once a week, during 45 minutes and there wasn't any work of this kind on the other school. The first school obtained the best performance than the second school in all factors of the battery, which are: tonicity, equilibration, lateralization, body notion, space-time structures, global praxis and thin praxis. It is concluded that on the school where children have physical education once a week, on which they have a development of their psychomotor areas, these children are more developed in all the factors of the PMB, of Fonseca, 1995, than the other children from the other school. So, the physical education has possibilities to develop the psychomotor dimension of people, especially on kids and it is of great importance in preschoolers learning.

Word-key: Psychomotor Battery; children; profile psychomotor.

#### COMPARACION DEL PERFIL PSICOMOTOR ENTRE NIÑOS DE 4 Y 5 AÑOS EN 2 COLEGIOS PRIVADOS

El presente estudio verificó el desarrollo psicomotor de niños y niñas entre 4 y 5 años de edad, en 2 colegios privados. El colegio 1 desarrolló una actividad psicomotora con niños en clases de educación física, una vez a la semana: el colegio 2 no disponía de clases de educación física a nivel pre escolar. Identificar el déficit psicomotor en niños de 4 y 5 años de edad con la finalidad de constatar si la educación física direccionada a la psicomotricidad ofrece grandes posibilidades de suceso. El estudio es de tipo transversal y fué realizado en la ciudad de Anápolis-Goiás en 2 colegios privados. En total fueron evaluados 31 niños entre 4 y 5 años, de ambos sexos, 19 niños y 12 niñas. Siendo 8 niños y 8 niñas en el primer colegio y 11 niños y 4 niñas en el segundo colegio. En uno de los colegios, la profesora de educación física trabajaba la psicomotricidad, en clases específicas, una vez a la semana, durante 45 minutos y en el otro colegio no habia ninguna actividad relacionada al trabajo de la psicomotricidad. Al comparar ambos, el colegio 1 obtuvo mejor desempeño que el colegio 2 en todos los factores de la BPM: tonicidad, equilíbrio, lateralización, noción corporal, estructuración témporo-espacial, praxia global y praxia fina. Se concluye que el colegio en el cuál los niños tienen clases de educación física una vez a la semana, centrada en el desarrollo de las áreas psicomotoras, tienen un mejor desarrollo en todos los factores de la BPM (Fonseca, 1995) que los niños del colegio que no tienen esta actividad psicomotora. Debido a la posibilidad de desarrollar la psicomotricidad de los individuos, principalmente niños, la educación física en conjunto con los domínios cognitivos y sociales, es de gran importancia en la enseñanza pre escolar.

Palabras llave: Batería psicomotora; niños; perfil psicomotor.

# COMPARAISON DU PROFIL PSYCOMOTEUR ENTRE LES ENFANTS DE 4 ANS ET 5 ANS CHEZ LES ÉCOLES

PRIVÉES.

Cet étude a vérifié le developpement psycomoteur de filles et enfants entre 4 et 5 ans, dans les écoles privées. La première école a developpé une activité psycomotrice avec des enfants dans les classes d'éducation physique, une fois par semaine. La deuxième école n'avait pas de classes d'éducation physique dans le niveau pre-scolaire. Identifier le déficit psycomoteur chez les enfants de 4 et 5 ans avec la finalité de constater si l'éducation physique directionné à la psycomotricité offre de grandes possibilités de réussite. Cet étude de type transversal et il a été réalisé par la ville de Anápolis-Goiás, dans 2 écoles privées. En tout, ils ont été évalués 31 enfants entre 4 et 5 ans, de deux sexes : 19 enfants et 12 filles. Dans la première école, ils ont participé 8 enfants et 8 filles. Au decond : 11 enfants et 4 filles. Dans l'une des écoles, le professeur d'éducation physique travaillait la psycomotricité, dans des classes spécifiques, une fois par semaine, pendant 45 minutes et dans l'autre école il n'y avait aucune activité rapporté au travail. Si on compare l'école 1, elle a eu un meilleur rôle que 1'école 2 dans tous les facteurs de la BPM : tonicité, équilibre, lateralisation, notion corporelle,structuration tempora-spatiale, praxia-globale et praxia fina ( plus détaillée.)On infère que dans les écoles où les élèves ont eu des classes d'éducation physique une fois par semaine, centrée dans le développement des parties (surfaces) psycomotrices, ils ont un meilleur développement dans tous les facteurs de la BPM (Fonseca 1995) que chez les enfants des écoles qui n'ont pas cette activité psycomotrices.Dû à la possibilité de développer la psycomotricité des individus, principalement chez les enfants, l' éducation physique en tout, avec les domaines cognitifs et sociaux, represente un rôle très important dans l'enseignement pre-scolaire.

Mots clé : Baterie psycomotrice ; enfants ; profil psycomoteur.