# 69 - COMPARATIVE STUDY OF MATURITY LEVEL OF FUNDAMENTAL MOVEMENTS BETWEEN SCHOOLCHILDREN FROM PUBLIC AND PRIVATE SCHOOLS FROM DIFFERENT REGIONS OF RIO DE JANEIRO

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## INTRODUCTION

Motor development is characterized by a continuous process from birth to death, evolutive, complex and interconnected of the human being, where all maturational aspects and organic growth in progressive changes participate. The child reaches motor behavior patterns through those aspects of the evolution of organizational structure and also through environmental influence.

Childhood is marked by motor experiences that are important for the maturation of the more specific skills, as these depend on various combinations of the basic skills (GALLAHUE e CONNOLLY, 2010).

Regarding the development of motor skills, Gallahue e Ozmun (2005), claim that, around the age of six children already have advanced potential development, and may be in a mature stage in most fundamental motor skills and after that period beginning to refine what they have learned, forming specialized skills.

Studies on motor development are analyzed from the changes that occur in the developing child, and environmental influences that contribute to the construction of this ongoing process. Gallahue e Ozmun (2005) present an observation protocol of fundamental movements, which presents analysis of 23 movements between categories of stabilizers, locomotor and manipulative movements, these, according to the protocol should be analyzed in the initial, elementary or mature levels.

The influence of the environment is essential and indispensable for the child's performance. The exploration of the environment by the child is influenced by a number of possibilities to move on site and perform different types of tasks. Changes in living conditions of the population in recent decades have significantly influenced the child population, which progressively has suffered from physical inactivity (RIBEIRO, 2001). The school system in Brazil is divided into public and private. Unfortunately our public school system undergoes an educational crisis in terms of quality and various conditions. These conditions place public schools education as overdue compared to private schools. In addition to reflecting on the students in terms of results especially in childhood where one must try out various possibilities for cognitive skills.

The purpose of this research is to identify and compare the maturity level of the fundamental movements, among children attending public and private schools in Rio de Janeiro, following the observation protocol of maturity level of the fundamental movements proposed by Gallahue e Ozmun (2005).

## METHODOLOGY

The subjects of the sample components amounted to a total of 400 schoolchildren aged 8 to 10 years from ten public and private schools of Rio de Janeiro, of both genders, being 40 students from each school.

The instruments used in the research were the Maturing Level Analysis Protocol of Fundamental Movements proposed by Gallahue and Ozmun (2005) that measures 23 movements organized in analysis classes to stability, locomotion and manipulative movements category.

Statistical analysis with reference under review in quantitative analysis was based on measures of central tendency ( arithmetic mean ) and dispersion ( standard deviation) , complementary cumulative function, estimates of probability density functions , Pearson correlation coefficient (ROSS, 2010).

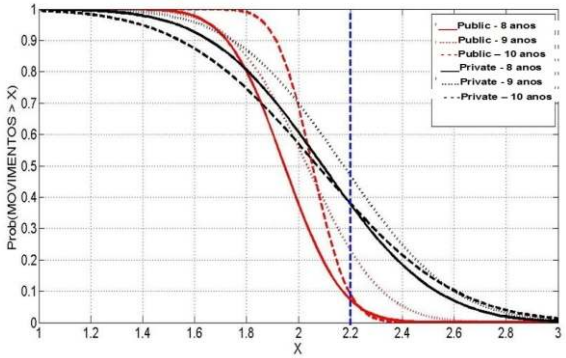
## RESULTS

Below are the data plotted on figure 1 and Table 1, relating to the results of the observation protocol of the maturity level of the fundamental movements per group, Maturity Level of Fundamental Movements Public Schools and Maturing level of Fundamental Movements Private schools.

Table 2 : Mean and standard deviation of Fundamental Movements of Public and Private Schools

| | PUBLIC SCHOOL | PRIVATE SCHOOL |
|---|---|---|
| MEAN | 1,9867 | 2,16 |
| STANDARD DEVIATION | 0,1017 | 0,3570 |

Figure 1 : Probability of Fundamental Movements East for school be greater than X of public and private schools



The results shown in the graph above show that among the groups analyzed, the sample components of the study, private schools have better results in the Maturity Level of Fundamental Movements compared with public schools.

These results show that most of the children had maturity level of Fundamental Movements as Elementary, considering the analysis with variation between initial, elementary and mature levels.

**CONCLUSION**

Based on the results for the fundamental movements maturity level show that, in general, the children had elementary level of maturity. These results reflect a certain fault in motor development, which can be a result of the low level of motor trials within and outside the school environment, carried out by children and teens. Comparing public and private schools

Comparing public and private schools, private schools , stood out in the ripening level of Fundamental Movements .

The context or environment in which children are placed and the demands of the proposed tasks can positively influence the appearance of new skills (GALLAHUE and CONNOLLY, 2010).

The conclusive findings can help understand the infant motor development process, enabling professionals involved with the Basic Education to be able to assess and intervene by means of the adequacy of proposed activities in their classes.

The evaluation of motor skills in elementary school can contribute to the development of a more effective educational program pointing out negative and positive points as well as suggestions that contribute to improving the quality of teaching physical education in elementary school. Thus assessment tests that demonstrate students' motor profile so as to improve the work is fundamental attending to their main needs, in order to supply any motor deficiency (Santos, Ramos and Rosa Neto, 2002; Ribeiro , Pinto and Sparrow, 2002;, Bessa, 2002; Paula, 2009; Berleze, 2007; Santos, 2006; Brum, 2009; Sabagg, 2008; Souza, 2007; Bretas, 2005).

**REFERENCES**

BERLEZE, A.; HAEFFNER, L. S. B.; VALENTINI, N. C. Desempenho motor de crianças obesas: Uma investigação do processo e produto de habilidades motoras fundamentais. Revista Brasileira de Cineantropometria & Desempenho Humano. v.9, n.2, p. 134-144, 2007.

BESSA, M. F. S. & PEREIA J.S. Equilíbrio e coordenação motora em pré-escolares: um estudo comparativo. Revista Brasileira Ciência e Movimento. Brasília , v.10 ,n.4 ,p.57-62,outubro 2002.

BRETÂS, J. R. S.; PEREIRA S. R; CINTRA, C. C; AMIRATI, K. M. Avaliação de funções psicomotoras de crianças entre 6 e 10 anos de idade. Acta Paulista de Enfermagem. Disponível em: <http://www.scielo.br/pdf/ape/v18n4/a09v18n4.pdf>. Acesso em: 17 set. 2006.

BRUM, K. O; NETO, F. R. O perfil motor de escolares obesos.EFDeportes.com- Revista Digital Buenos Aires. Ano 14- Nº 134.2009. Disponível em: http://www.efdeportes.com/efd134/perfil-motor-de-escolares-obesos.htm. Acesso em: 17 set .2009.

GALLAHUE, D.; OZMUN, J. Compreendendo o desenvolvimento motor: bebês, crianças,

adolescentes e adultos. São Paulo: Phorte, 2003.

PAULA, A. E. da S.; BELO, C. Avaliação do desenvolvimento motor de alunos de natação e futsal através do teste de Bruininks. EFDeportes.com - Revista Digital Buenos Aires. Nº 133, 2009. Disponível em: <http://www.efdeportes.com/efd133/avaliacao-atraves-do-teste-de-bruininks.htm>. Acesso em: 25 ago. 2009.

RIBEIRO, C. G.; PINTO, T.C.; PARDAL, D. P.H. O desenvolvimento da coordenação motora através de jogos recreativos em alunos de 08 a 09 anos. Anais 11º Congresso Catarinense de Educação Física. Santa Catarina, 2002. Disponível em: <http://www.apefsc.com.br/index.php?codpagina=00023541>. Acesso em 30 ago. 2009.

ROSA NETO, Francisco. Manual de avaliação motora. Porto Alegre: Artmed, 2002

SOUZA, C. de; FERREIRA, L.; CATUZZO, M. T. et al. O teste ABC do movimento em crianças de ambientes diferentes. Revista Portuguesa Ciência Desportiva. [online]. jan. 2007, vol.7, no.1, p.36-47. Disponível em: http://www.scielo.oces.mctes.pt/scielo.php?script=sci_arttext&pid=S1645-05232007000100005&lng=pt&nrm=iso>. ISSN 1645-0523.>. Acesso em: 17 set. 2009.

SANTOS A. M.C. et al. Avaliação motora na prática de ensino. 11º Congresso Catarinense de Educação Fisica. Santa Catarina. Disponível em http://www.apefsc.com.br/index.php?codpagina=00023541> .Acesso em: 30 ago .2009.

SANTOS, C. F. Z. MEDEIROS, F. D. Estudo comparativo do desenvolvimento neuropsicomotor e perfil psicossocial de crianças pré-escolares entre 03 e 05 anos de idade dos Centros Educacionais Infantis Mickeylândia e Pirulito de Termas do Gravatal-SC. Tubarão 2006. Disponível em: <http://www.fisio-tb.unisul.br/TCC2006b.html>. Acesso em: 17 set .2009.

SABAGG, S; CARDOSO, F.L.; SILVEIRA, R.A ; COSTA,T.P. O desenvolvimento motor de escolares. Fazendo Gênero 8 - Corpo, Violência e Poder. Florianópolis, de 25 a 28 de agosto de 2008. Disponível em: <http://www.fazendogenero8.ufsc.br/sts/ST53/Sabagg-Cardoso-Silveira-Costa_53.pdf>. Acesso em: 12 set .2009.

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**COMPARATIVE STUDY OF MATURITY LEVEL OF FUNDAMENTAL MOVEMENTS BETWEEN SCHOOLCHILDREN FROM PUBLIC AND PRIVATE SCHOOLS FROM DIFFERENT REGIONS OF RIO DE JANEIRO**

**ABSTRACT**

The purpose of this research is to identify and compare the maturity level of the fundamental movements among children attending public and private schools in Rio de Janeiro following the observation protocol of maturity level of the fundamental movements proposed by Gallahue and Ozmun (2005). The sample components amounted to a total of 400 schoolchildren aged 8 to 10 years from ten public and private schools of Rio de Janeiro of both genders being 40 students from each school. The instruments used in the research were the Maturing Level Analysis Protocol of Fundamental Movements proposed by Gallahue e Ozmun (2005) that measures 23 movements organized in analysis classes to stability, locomotion and manipulative movements category. The results showed that among the groups analyzed the sample components of the study, private schools showed better results in the maturity level of Fundamental Movements compared with public schools. These results show that most of the children had maturity level of Fundamental Movements considered as Elementary, considering the analysis with variation between initial, elementary and mature levels. These results reflect a certain fault in motor development, which can be a result of the low level of motor trials within and outside the school environment, carried out by children and teens.

**KEYWORDS:** Fundamental Movements, Public and Private School, Motor Development.

**ÉTUDE COMPARATIVE SUR LA MATURITÉ DE LES MOUVEMENTS FONDAMENTAUX ENTRE LES ÉLÈVES ISSUS DE LES ÉCOLES PRIVÉES ET CEUX-LÀ DE LES ÉCOLES PUBLIQUES DES DIFFÉRENTES RÉGIONS DE RIO DE JANEIRO**

**RESUMÉ**

La recherche ici presentée a comme objectifs identifier et comparer le niveau de maturité de les Mouvements Fondamentaux des enfants issus de les écoles privées et publiques de Rio de Janeiro en utilisant le Protocole d'Analyse du Niveau de Maturité de les Habilités Motrices Fondamentaux proposé par Gallahue e Ozmun (2005). L'échantillon a été composé de 400 étudiants âgés de 8 à 10 ans, venus des écoles privées et des écoles publiques, issus des différentes régions du Rio de Janeiro. L'étude porte sur dix écoles (cinq publiques et cinq privées), 40 élèves de chaque école. L'instruments utilisé dans la présente étude était le Protocole d'Analyse du Niveau de Maturité de les Habilités Motrices Fondamentaux proposé par Gallahue e Ozmun (2005), lequel évalue 23 mouvements organisés en classes d'analyse pour trier les mouvements stabilisateurs, locomoteurs et manipulatifs. Les résultats observés montrent la supériorité au Niveau de Maturité de les Mouvements Fondamentaux de les enfants de les écoles privées. Alors, parmi les groups analysés, l'École Privée de la Plaine Côtière Fluminense a présenté un mieux résultat au Niveau de Maturité de les Mouvements Fondamentaux que l'école publique de la Zone Sud, laquelle a eu le pire. Les autres groupes comparés ont révélé que presque aucune différence d'entre eux au Niveau de Maturité de les Mouvements Fondamentaux. Les éléments conclusives sugèrent que le lieu d'apprentissage est une variable marquante pour la différence. D'ailleurs, ils aussi indiquent que la majorité de les enfants a présenté le Niveau de Maturité de les Mouvements Fondamentaux avec maturité « primaire », quand il existe la gradation : initiale, primaire et mature. Ce type de réponse indique que les enfants d'une façon général explicitent faute au développement moteur, laquelle peut-être conséquence du bas niveau d'éxperimentations motrices dedans et dehors l'ambiance scolaire, realisés par les enfants et les préadolescents.

**MOTS-CLÉS:** Développement Moteur, Écoles Privées et Publiques, Mouvements Fondamentaux

**ESTUDIO COMPARATIVO DEL NIVEL DE MADURACIÓN DE LOS MOVIMIENTOS FUNDAMENTALES ENTRE LOS ESTUDIANTES DERIVADOS DE LA ESCUELA PÚBLICA Y PRIVADA DE DIFERENTES REGIONES DE RÍO DE JANEIRO**

**RESUMEN**

El objetivo planteado en este artículo es identificar y comparar el nivel de maduración de los movimientos fundamentales, entre los niños que asisten a escuelas públicas y privadas de Río de Janeiro, siguiendo el protocolo de observación del nivel de maduración de los movimientos fundamentales propuesto por Gallahue y Ozmun (2005). Los temas de los componentes de la muestra ascendió a un total de 400 escolares de 8 a 10 años, procedentes de diez escuelas públicas y privadas de Río de Janeiro, de ambos sexos, con 40 alumnos de cada escuela. El instrumento utilizado en la investigación fue el Protocolo de Análisis del Nivel de Maduración de los Movimientos Fundamentales propuesto por Gallahue y Ozmun (2005), que miden 23 movimientos organizados en clase de análisis para la categoría de los movimientos estabilizadores, locomotores y manipulativos. Los resultados mostraron que entre los grupos analizados, los componentes de la muestra de estudio, las escuelas privadas mostraron mejores resultados en el Nivel de Maduración de los Movimientos Fundamentales en relación con las escuelas públicas. Comparando las regiones de origen de las escuelas, la escuela privada en la región llamada Baixada Fluminense presentó un Nivel de Maduración de los Movimientos Fundamentales superior y la escuela pública en la región llamada Zona Sur el peor resultado. Los otros grupos mostraron poca diferencia en comparación con los demás, en el Nivel de Maduración de los Movimientos Fundamentales. Estos resultados indican que la mayoría de los niños tenían el nivel de maduración de los movimientos fundamentales con clasificación considerada Elemental, teniendo en cuenta el análisis con variación entre los niveles inicial, elemental y maduro. Estos resultados reflejan un determinado fallo en el desarrollo motor, que puede ser el resultado del bajo nivel de los ensayos motores dentro y fuera del ámbito escolar, realizados por los niños y preadolescentes.

**PALABRAS CLAVE:** Movimientos Fundamentales, Escuela Pública y Privada, Desarrollo Motor

**ESTUDO COMPARATIVO DO NÍVEL DE AMADURECIMENTO DOS MOVIMENTOS FUNDAMENTAIS ENTRE ESCOLARES ORIUNDOS DA REDE PÚBLICA E PARTICULAR DE ENSINO DE DIFERENTES REGIÕES DO RIO DE JANEIRO**

**RESUMO**

O objetivo levantado nesse artigo foi identificar e comparar o nível de amadurecimento dos movimentos fundamentais, entre crianças de escolas públicas e particulares do Rio de Janeiro, seguindo o protocolo de observação do nível de amadurecimento dos movimentos fundamentais proposto por Gallahue e Ozmun (2005). Os sujeitos componentes da amostra perfizeram um total de 400 escolares, com idade entre 8 e 10 anos, oriundos de dez escolas da rede pública e particular do Rio de Janeiro, de ambos os gêneros, sendo 40 alunos de cada escola. O instrumento utilizado na pesquisa foi o Protocolo de Análise do Nível de Amadurecimento dos Movimentos Fundamentais proposto por Gallahue e Ozmun (2005), que avaliam 23 movimentos organizados em classe de análise para categoria de movimentos estabilizadores, locomotores e manipulativos. Os resultados mostraram que dentre os grupos analisados, componentes da amostra do estudo, as escolas particulares apresentaram melhores resultados no Nível de Amadurecimento dos Movimentos Fundamentais em relação às escolas públicas. Esses resultados indicam que a maioria das crianças apresentou nível de Amadurecimento dos Movimentos Fundamentais com classificação considerada Elementar, considerando a análise com variação entre níveis inicial, elementar e maduro. Esses resultados refletem uma certa falha no desenvolvimento motor, que pode ser consequência do baixo nível de experimentações motoras dentro e fora do ambiente escolar, realizadas por crianças e pré-adolescentes. Na comparação entre escolas públicas e particulares, as Escolas Particulares se destacaram no Nível de Amadurecimento dos Movimentos Fundamentais.

**PALAVRAS-CHAVE:** Movimentos Fundamentais, Rede de Ensino Pública e Particular, Desenvolvimento Motor