

137 - PHYSICAL EDUCATION SCHOOL: IN SEARCH ENGINE DEVELOPMENT

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INTRODUCTION

The development process varies from individual to individual, from group to group. Great sets and factors influencing this process of differentiation such as biological factors that determine specific skills, limits to performance and development trends, as well as socio-cultural factors that guide the development of individuals, groups and even gender, accumulation of motor experience, be done in an organized or structured, or informally (BARRETO & NETO, 1989).

Motor development in childhood is characterized by the addition of a broad spectrum of motor skills, which allows the child a broad area of your body and movements (SANTOS, DANTAS, OLIVEIRA, 2004).

According to the studies of Braga, Krebs, Valentini and Tkac (2009) children with chronological age 6 (six) and 7 (seven) years of age are in transition from elementary stage to mature stage and just at this stage the opportunity to sports, can provide the success of motor skills in adolescence and adulthood.

However, Gallahue and Oznum (2005, p.61) argue that the individual can develop motor skills with specialized skills fundamental movement skills must reach the mature stage of development. Still argue that children of six (6) and seven (7) years already possess the cognitive and motor to reach this stage, which is highly dependent upon the maturity and experience.

Therefore, opportunities for practice, encouragement, instruction are environmental factors that must be nurtured to promote this development. The gross motor skill depends largely on motor stimuli and practice experienced in childhood (GALLAHUE, OSMUN, 2005).

According to Ferreira (2000), movements learned during childhood characterize the basis for learning at a later stage. Motor skills that children acquire at an early stage are improved in adulthood.

The movement is an important factor for the development of human culture. Since birth we move and gradually we acquire control of our body, interacting with the world, expressing our feelings, emotions and thoughts. The discipline of physical education has as one of its goals to create opportunities for the movement and thus impart the knowledge to minimize the delays identified that is the goal of the physical educator (STRING, 1994).

According to Rodrigues (1997), Physical Education is an aspect of education, part of a whole, therefore pursue the same goals of education, that is to train individuals physically, mentally and spiritually healthy. Give the opportunity for movement, and through him the knowledge of man's education through movement, because this in varied presentations is an instrument or means to educate, train and improve.

Therefore, it is important that schools close to the physical educator to plan physical activities for children to remain active long enough to stay healthy, as for many children school is the only opportunity for health-related fitness (BRAGA ; GENEROSITI; GARLIPP; GAYA 2008).

It is important to develop programs that are intended to enhance the development of new skills and find the problems posed, thus developing new movement strategies that may help identify levels of development for the diagnosis, allowing professionals the opportunity to identify factors that make the limited movement (VALENTINI 2008).

To this end, we aim to assess the overall motor performance of children of six and seven years old. The specific objectives of this study are: psychomotor Diagnosing children of six and seven years old; compare the motor performance of girls and boys of six and seven years old; Check that the physical education program that subjects have in school is providing the same engine performance.

METHOD**Subjects**

It is a quasi-experimental research with descriptive characteristic (GIL, 1991), as that is concerned with describing the motor performance of 30 children between six and seven years of age ($M = 6.69$, $SD = 0.55$). These study subjects in the first and second year of elementary school to a private schools of the city of Mogi das Cruzes.

Instruments and materials

All subjects had their motor development assessed by testing motor performance offered by the Test of Gross Motor Development (TGMD) Rich (1985). This test measured competency in motor skills of each child involved in this study.

The TGMD includes 12 tasks of which 7 are locomotor skills (run, gallop, skip, jump on the same foot, heel and both feet, past, and race side) and 5 are object control skills (bounce, bounce, receiving, kicking, throwing).

In order to verify that the physical education program that subjects have in school is providing the same performance engine perform semi - structured interviews with the teacher responsible for physical education classes (attached).

This interview had seven open questions were designed to investigate the contents, objectives and methods worked in physical education classes, as well as the main motor difficulties the subjects in this study.

The materials used for the tasks were: two large cones to support the ball in batting, bat a bat to bat, a small cone for use of the last obstacle, a 10 cm ball to receive, a basketball to the task of bouncing, three tennis balls to roll and pitch tasks; and a soccer ball to kick activity.

To capture the tests the subjects used a camcorder Fujifilm Finepix z30 10.00.

Procedure

After approval of the school board informed consent form was sent to parents. Data collection was performed in the school yard for three days pre-determined, with only those subjects whose parents agreed.

For data collection the subjects were dressed in cloth pants or shorts and sneakers. The application of the test took about 20 minutes per child. The collection started with the tests of control objects and then we continued with the mobility. Each

subject performed three times each movement, however, considered only the latter two, the first task was to familiarize.

After collecting the data were analyzed using the captured images. The analysis of the videotape took approximately 30 minutes per child.

The teacher responsible for physical education classes was interviewed at the school one day after the collection of students. The interview lasted about 20 minutes.

Data Analysis

The TGMD is a multiple testing that obtains information on the capacity in their ability to move objects and control of each individual allowing a separate assessment of each sub-scale (movement and object control). The test allows the assessment of motor skills integrated into the statistical model of each test

The reported test scores include raw data, standard and percentile for each of the two subscales of the TGMD (locomotor skills and object control).

Considering the raw data, the lowest score for each subscale is zero and the highest is 26 for the subscale skills of locomotion and 19 for sub-scale of the object control skills, with a sum total of 45 points maximum. The raw data are obtained by the sum of points received by each individual in the execution of motor skills, since each movement performed by the individual in each trial. The percentile is also provided and has been constantly used as a complementary measure in understanding the test results.

The data were presented by descriptive analysis and values of central tendency (mean) and dispersion (standard deviation), suffering a first test of normality Shapiro-wilking. For data that showed a normal distribution we used the Student's t test for independent samples to compare the groups, and those with a non-normal distribution Kruman Wallis test. All tests were performed in the computer package SPSS 19.0 for Windows, with the significance level of $p < 0.05$ for comparison between groups.

RESULTS

Table 1 shows that there was no significant difference being the chronological age of the subjects, indicating homogeneous sample. It also indicates that there was no significant difference between sexes for the ages of motor control and movement of objects, however, we found that all subjects were classified below the chronological age for locomotor skills.

Table 1: Mean, standard deviation and significant differences between genders for chronological age categories, age locomotor motor, motor control objects age and gross motor quotient.

CATEGORIES	FEMALE	MALE	p
Chronological age	6,68±0,58	6,70±0,53	ns
Motor Age			
Locomotor	6,29±0,31	6,21±0,94	ns
Age Motor			
Control Objects	7,04±0,98	6,75±1,36	ns
Gross Motor Quotient	96,78±5,19	91±8,06	0,033

Although Table 1 shows results significantly different in relation to gross motor quotient, girls perform better, compared with boys. However, in Table 2 shows that both were classified as average. But, we also observed that the average male scored a minimum classification on the average (91) and the high standard deviation, which means lack of consistency in the results.

Table 2: Mean and standard deviation (SD) of raw data and kinds of classificatory category. *Significant difference between sexes for the raw data of the motor performance control objects

GROUP	PERFORMANCE MOTOR		*MOTOR CATEGORIES DESCRIPTIONS	
	Average/DP	Average/DP	Locomotion	Control de obj.
Gender				
Females	37,78±1,36	33,57±3,47	Average	Average
Male	34,71±5,15	37,5±4,32*	Average	Average

Note: Seven categories of motor performance are provided by the author of the test TGMD (Ulrich, 1985) structured from the raw data: Very Poor, Poor, Below Average, Average, Above Average, High and Very High.

In relation to the raw data, females had higher scores in relation to locomotor tasks, although not significantly. The same was found in the category of motor performance, which were placed in the middle while the boys were below average in relation to locomotion.

The results of the control objects we observe the inverse of the locomotive, that is, the boys were the ones that had significantly higher scores on tasks, however, this difference was not confirmed in the category of motor performance, as both were ranked in the middle.

The semi-structured interview conducted with the Physical Education teacher informed us that the subjects participating in one of these classes once a week for 50 minutes. The interviewee stated that it uses a specific method for the application of lessons, but has tools such as internet, books and guidance of colleagues. The contents are mostly taught fun games, which are prepared to entertain the students.

When asked about the difficulties faced by students and assessment to identify them, the teacher told us that the group has no apparent difficulties, however, no evaluation is performed to detect motor problems, but when it identifies some

difficulty she informed us that. " .. analyze the difficulty and try a fun activity to enhance development. "

DISCUSSION

According to Gallahue and Ozmun (2005) children aged six / seven years should be in the mature stage of fundamental motor skills, motor skills at this stage should be already fully developed. Therefore, the results of the analysis skills of movement and control of the objects of study subjects should present at least in the motor category average.

However, the results indicated delays engines. For both mobility tasks subjects had motor below the chronological age, indicating motor delay.

Some studies with a view to identify motor delays in children. Valentini (2002) to assess children from seven to nine years also found that the level of motor performance was lagging behind their chronological age.

Similar results were also found in studies by Mascarenhas et al (2010). When students investigate the age of seven from two public schools in the city of Manaus / AM results showed motor age below their chronological age.

Surdi and Krebs (1999) investigated six fundamental motor skills (walking on the beam, running, jumping horizontally, throw, kick and bounce) and found that most school children aged 6 years old were classified as elementary level of motor performance, when it should be with their motor skills in the mature level. These authors suggested a lack of opportunities for diverse practice and lack of education as factors in the performance of the children surveyed.

Among the disciplines of Physical Education in school is the one that works directly with the practice and thus can provide conditions for development and learning of the movement. However, the reports of Professor of Physical Education obtained through the interview told us that students take only one of these classes once a week for 50 minutes. We also note that there is a specific method used for teaching and learning of physical education classes, leading us to believe that just as the methods are not defined objectives follow the same pattern.

According to Valentini (2002) that will enrich the participation motor skills depends on fundamental movement practice during childhood. Children and young people who carry out activities during the school years the practice of incorporating them in their adult lives. Gallahue and Ozmun (2005) argue that free play contribute to the development of fundamental movement skills, but for children to reach mature levels of developing an instructional program is essential.

In this sense we believe that physical education classes in schools should be prioritized in order to overcome the need to move that children today are being deprived. However, according to Oliveira (2005) this process is being reversed, this gap formation is increasingly limited, the school no doubt, are not giving importance to the lack of movement practice. Of the three classes of the discipline of physical education that children had, now have two, and in some cases, a weekly class. Thus, the author argues that our children are living a "illiteracy engine."

According to Mattos and Neira (2006) "plan is all about the track, following it to confirm or correct" (p.68), and so reach that goal. Unfortunately, despite the planning of educational activities is of great importance, there are teachers who improvise their activities. As a result, fail to achieve the objectives for training (CASTRO AND CONTRIBUTORS, 2008).

The physical education teachers should plan their lessons so that students new experiences, practices and build motor and positive strategies for teaching and learning to respond to the needs of students (MASCARENHAS ET AL. 2010).

When comparing genders, we found that both were classified as average performance for the motor skills of movement and no significant differences. Regarding the ability to control the boys performed significantly higher, however, both were classified as average.

Valentini (2002), Brauner and Valentini (2009) and Mascarenhas and colleagues (2010) also studied gender differences. For the two studied motor skills, locomotor and object control, the authors found that these results were similar to this research, that is, boys and girls show similar levels of locomotor performance engine, while boys show higher levels of performance motor control objects.

According to the reports of the physical education teacher also found that no type of assessment to identify motor problems. The assessment is a means by which one assesses whether the objectives, the practice of physical education and bodily experiences allows several thousands of events capable of generating knowledge. Only if we evaluate the motor development can get concrete information from physical disabilities. (BARRETO AND FIN 2010)

The physical education teachers should plan their lessons so that students new experiences, motor and building practical strategies for teaching positive learning needs to respond to them. Therefore, it is very important to carry out assessment to identify these motor delays and meet the needs of students.

CONCLUSION

Objective of this research was to evaluate the motor performance of children of six and seven years old. The only chance was denied that the subjects had high levels of motor performance. This result was expected because the children studied attend physical education classes where they study, and have suggested that chronological age already have motor experiences.

However, the results indicated that the subjects are older motor less than chronological age, showing delayed motor development.

We found that there is no assessment conducted with the students. Evaluation is one of the most effective means by which outlines the objectives and makes sure these are being achieved. Through the evaluation of motor problems we obtain knowledge and information to build engines planning lessons that meet the needs of students and thus contribute to the development of the movement.

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PHYSICAL EDUCATION SCHOOL: IN SEARCH ENGINE DEVELOPMENT SUMMARY

This study aimed to evaluate the motor performance of children of six and seven years old For this purpose, we analyzed 30 children, 15 boys and 15 girls, 6 and 7 years old studying in a private network of Mogi das Cruzes. The children were submitted to the Test of Gross Motor Development (TGMD), the teacher participated in a semi-structured interviews that were designed to investigate the contents, objectives and methods worked out in class, as well as the main motor difficulties of the subjects of this study. The data were presented by descriptive analysis and values of central tendency (mean) and dispersion (standard deviation), suffering a first test of normality Shapiro-wilking. For data that showed a normal distribution we used the Student's t test for independent samples to compare the groups, and those with a non-normal distribution Kruman Wallis test. All tests were performed in the computer package SPSS 19.0 for Windows, with the significance level of $p < 0.05$ for comparison between groups. The results showed that: (1) The subjects were classified as average motor performance, however, showed locomotor motor below the age chronological age, (2) Both sexes show similar performance in the skills of movement, (3) Children demonstrate superiority significant skills in object control. This study allowed us to determine that the class have studied children with motor problems, and this information will be possible to build planning practices that come against such delays.

KEYWORDS: motor development, physical education, motor delays.

SCOLAIRES D'EDUCATION PHYSIQUE: DANS LE DÉVELOPPEMENT MOTEUR DE RECHERCHE SOMMAIRE

Cette étude visait à évaluer les performances motrices des enfants de six et sept ans À cette fin, nous avons analysé 30 enfants, 15 garçons et 15 filles, 6 et 7 ans qui étudient dans un réseau privé de Mogi das Cruzes. Les enfants ont été soumis à l'essai de Gross Motor Development (TGMD), l'enseignant a participé à une entrevue semi-structurée qui ont été conçus pour enquêter sur le contenu, les objectifs et les méthodes de travail en classe, ainsi que les difficultés du moteur principal des sujets de cette étude. Les données ont été présentées par des analyses descriptives et les valeurs de tendance centrale (moyenne) et la dispersion (écart type), la souffrance un premier test de normalité de Shapiro-Wilking. Pour les données qui ont montré une distribution normale, nous avons utilisé le test t de Student pour échantillons indépendants pour comparer les groupes, et ceux avec un test non-normale Kruman Wallis. Tous les tests ont été effectués dans l'ordinateur SPSS 19.0 pour Windows, avec le niveau de signification de $p < 0,05$ pour la comparaison entre les groupes. Les résultats montrent que: (1) Les sujets ont été classés comme des performances du moteur en moyenne, cependant, a montré du moteur de locomotion dessous de l'âge chronologique, l'âge, (2) Les deux sexes montrent des performances similaires dans les compétences du mouvement, (3) Enfants démontrer la supériorité des compétences importantes dans le contrôle d'objets. Cette étude nous a permis d'identifier les personnes qui ont des enfants dans la classe étudiée avec moteur, et cette information sera possible de construire des pratiques de planification qui viendront contre ces retards.

MOTS-CLÉS: Le développement moteur, De l'éducation physique, Des retards moteurs.

ESCUELA DE EDUCACIÓN FÍSICA: EN EL DESARROLLO DE MOTORES DE BUSQUEDA RESUMEN

Este estudio tuvo como objetivo evaluar el rendimiento del motor de los niños de seis y siete años de edad Para ello, se analizaron 30 niños, 15 varones y 15 mujeres, 6 y 7 años que estudian en una red privada de Mogi das Cruzes. Los niños se sometieron a la Prueba de Desarrollo Motor Grueso (TGMD), el profesor participó en una entrevista semi-estructurada que fueron diseñados para investigar el contenido, objetivos y métodos de trabajo en clase, así como las dificultades de motor principal de los sujetos de este estudio. Los datos fueron presentados por el análisis descriptivo y los valores de tendencia central (media) y dispersión (desviación estándar), sufriendo una primera prueba de normalidad de Shapiro-Wilking. Para los datos que mostraron una distribución normal se utilizó la prueba t de Student para muestras independientes para comparar los

grupos, y los que tienen un no-análisis normal de distribución Kruman Wallis. Todas las pruebas se realizaron en el paquete informático SPSS 19.0 para Windows, con el nivel de significación de $p < 0,05$ para la comparación entre los grupos. Los resultados mostraron que: (1) Los sujetos fueron clasificados como el rendimiento del motor promedio, sin embargo, mostró motor del aparato locomotor por debajo de la edad cronológica de la edad, (2) Ambos sexos presentan un rendimiento similar en las habilidades de movimiento, (3) Los niños demuestran superioridad habilidades importantes en el control de objetos. Este estudio nos permitió determinar que la clase han estudiado niños con problemas de motor, y esta información será posible la construcción de prácticas de planificación que vienen en contra de dichos retrasos.

PALABRAS CLAVE: Desarrollo motor, Educación física, El retraso motor.

A EDUCAÇÃO FÍSICA ESCOLAR: EM BUSCA DO DESENVOLVIMENTO MOTOR

RESUMO

Este estudo teve por objetivo avaliar o desempenho motor de crianças de seis e sete anos de idade. Para tanto, foram analisadas 30 crianças, 15 meninos e 15 meninas, com 6 e 7 anos de idade que estudam em uma rede privada de Mogi das Cruzes. As crianças foram submetidas ao Test of Gross Motor Development (TGMD), a professora participou de uma entrevista semiestruturada que tinham o intuito de investigar sobre os conteúdos, objetivos e métodos trabalhados nas aulas, assim como as principais dificuldades motoras dos sujeitos desse estudo. Os dados foram apresentados através da análise descritiva e em valores de tendência central (média) e dispersão (desvio padrão), sofrendo inicialmente um teste de normalidade de Shapiro-wilking. Para os dados que apresentaram uma distribuição normal foi utilizado o teste T-student para amostras independentes para comparar os grupos, e os que apresentaram uma distribuição não normal o teste de Kruman Wallis. Todos os testes foram realizados no pacote computacional SPSS 19.0 for Windows, tendo como nível de significância $p < 0,05$ para a comparação entre os grupos. Os resultados evidenciaram que: (1) Os sujeitos foram classificados na categoria média de desempenho motor, contudo, apresentaram idade motora locomotora abaixo da idade cronológica; (2) Ambos os gêneros demonstram desempenhos similares nas habilidades de locomoção; (3) Meninos demonstram superioridade significativa nas habilidades de controle de objetos. Esse estudo nos permitiu identificar que na turma estudada possuem crianças com problemas motores, e com essa informação será possível construir planejamento de práticas que venham de encontro a esses atrasos.

PALAVRAS CHAVE: Desenvolvimento motor, educação física escolar, atrasos motores.