

119 - MOTOR PERFORMANCE OF SCHOOL CHILDRENS AMAZONENSES

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**INTRODUCTION**

The motor performance is characterized by the functional capacity that the individual has to accomplish activities to demand muscular pledge or the individual aptitude demonstrated in sporting actions, above all in the capacity to accomplish work. That becomes evident when through tests we measured the capacities motive speed, it forces, resistance and the flexibility.

The mechanism used for determination of the levels of children's motor performance and adolescents, they are usually done through batteries of tests. In the constitution of these it is possible to notice the use of motor tests that you/they are applied in a sequence, in a such way that a test doesn't influence or harm the result of other. Other characteristics of this evaluation mechanism are the simplicity and applicability of the tests in diversified samples.

The investigation of the motor performance related to the sporting income, contributes in an effective way to the improvement of the evaluation process and orientation of the sport for children and adolescents. For GUEDES and GUEDES (2002) those varied when related to other information they can be constituted in important indicators of health of a young population.

However, it is necessary to look for data that give support for an evaluation of the motive capacities and of the growth patterns and motor acting, indicating the level of children's sporting income and adolescent (MARQUES, 1997).

This study was centered in the subjects of biological order regarding the children's motor performance in school age. We believed that starting from the found results can establish indexes of motor performance that translate: the health and the children's sporting income and adolescents in school age

This way we elaborated the following objectives: a) to determine the profile of children's motor perforance from seven to ten years of age, of both sexes, regularly enrolled in schools of the municipal public net of teaching of the city of Manaus; b) to compare the results of the variables of tests of motor performance and antropométricas of the present study, among the sexes.

**METHODOLOGY**

The research the battery of tests was used proposed by GUEDES (2002), where the tests of motor performance were used (1 jump in distance stopped, bar modified and race of speed 30m) and measured antropometricas (stature and body weight). The sample was constituted by 3878 school in the age group from seven to ten years of age of both sexes, regularly enrolled in public schools of the municipal net of teaching of the city of Manaus/Amazonas.

**RESULTS**

**Stature (cm)**

In relation to that váriavel the medium values of the male schoolchildrens stature vary between 120,8 cm and 134,4 cm, respective the age group from seven to ten years of age. The medium annual growth was of 4,5 cm, tends the largest increase in stature happened among the eight nine years of age (4,8 cm). in spite of the stature to increase in a progressive way, it happened a decrease of the growth values between the nine and ten years of age.

In relationship the school ones female, the medium values of stature vary between 119,8 cm and 135,6 cm, tends a medium annual growth of 5,2 cm. THE largest growth happened among the eight nine years of age (6,2 cm). As well as the male scholars, the increase of the stature was progressive, happening a decrease between the nine and ten years of age.

In the GRAPH 1 the values are compared of percentile (P10, P50 and P90) among the sexes in the age group from seven to ten years of age.

Analyzing the behavior of the curves of percentile, a progressive growth of the stature is observed in all of the ages. For percentile P10 discreet difference is observed between boys and girls in the seven eight year-old ages and equality to the nine and ten years. In percentile P50 observa-if discreet difference to the seven years, with superior values in the boys' favor. About the eight years it happens a crossing of the curves, following by a discreet increase of the stature of the nine to the ten years of age, with superior values in the girls' favor. In relation to percentile P90, discreet difference is observed in the girls' favor starting from the eight until the nine years, equaling to the ten years of age again.



GRAPH 1 - Curves of scholchildren from Manaus stature (AM), from seven to ten years of age, of both sexes in values of percentile.

In spite of the percentis curves they be held this way, when compared to the medium values of stature among the sexes, they were found significant differences (p <0,05) in the ages of seven, nine and ten years (sig. 0,008; sig. 0,005; sig. 0,002), not happening the same to the eight years of age (sig. 0,315). THE medium difference of stature for the samples varies between 0,9 cm and 1,2 cm.

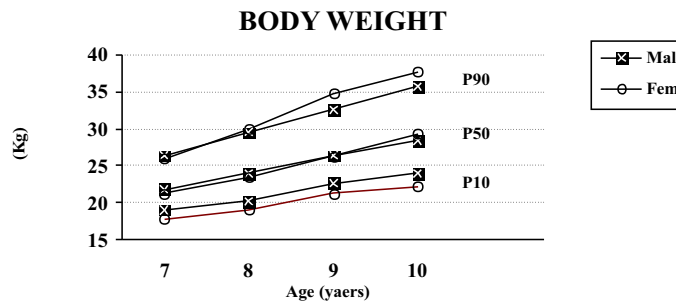
**Body Weigh (Kg)**

The male schoolchildren medium corporal weight varies from 22,2 Kg to 29,5 Kg, where the largest difference happens among the eight nine years of age (2,7 Kg). The medium earnings of weight happens in a progressive way in all of the ages, and between the nine and ten years it happens a discreet decrease (2,1 Kg). Considering the age group from seven to ten years, the medium increase of corporal weight for masculine sex is of 2,4 (Kg).

In relation to the feminine sex, the medium weight varies from 22,0 Kg to 30,1 Kg, happening the largest weight earnings among the eight nine years of age (3,4 Kg). As well as the male scholars the girls present a discreet decrease in the weight earnings between the nine and ten years of age (2,4 Kg). As for the increase of medium weight in agreement with the age group, the girls obtained an earnings of 2,7 Kg.

In spite of the medium values of corporal weight they present not significant differences in none of the ages, the medium difference for age group of the study was from 0,227 Kg to 0,603 Kg. In spite of this behavior to the we analyze in the GRAPH 02 found in the percentis P10 and P90 different values among the groups.

In relation to percentile P10 we observed different values in all of the ages, being the heavier male scholars than the female. For percentile P50, we observed that to the seven eight years of age the boys present discreet increase in relation to the girls, happening a balance to the nine years of age, following by a discreet increase in the girls' favor. Percentile P90 demonstrates there to be to the seven years of age a discreet increase in the boys' favor, happening a crossing of the curve soon afterwards of percentile between the seven and the eight years of age. To the eight years of age the girls start to present an increase of corporal weight, staying like this until the ten years of age.



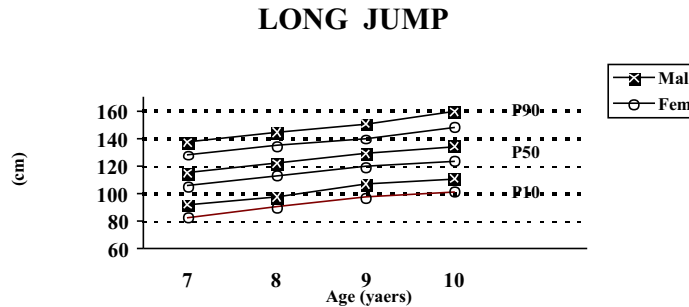
GRAPH 2 - Curves of schoolchildrens from Manaus body weight (AM), from seven to ten years of age, of both sexes in values of percentile.

Test of long jump stopped (cm)

Comparing the medium values of the long jump test among the school children, we verified that the boys present larger results in all of the ages in relationship the girls. The medium values vary among 114,4 cm to 134,3 cm for the boys and 105,0 cm to 124,5 cm for the girls, demonstrating tendency of progressive increase of the acting in the age group from seven to ten years of age.

The medium difference in the long jump test stopped among the groups varies among 9,2 cm to 10,2 cm. The largest difference is observed in the nine year-old age. Statistical those results present significant differences.

When we went through the percentis curves for comparison of the groups verified that in all of them age the boys present larger performance in relationship the girls (GRAPH 3).



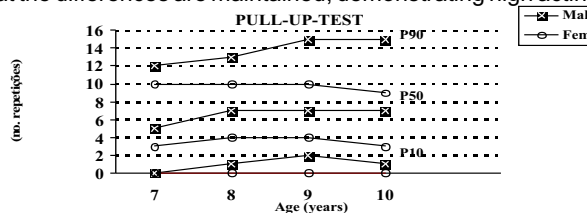
GRAPH 3 - Curves of the long jump stopped test of school childrens from Manaus (AM), from seven to ten years of age, of both sexes in values of percentile.

Pull-up-test (no. of repetitions).

The results of the force/resistance tests for superior members in school childrens of both sexes in the age group from seven to ten years of age, demonstrated medium values of the flexing tests and extension of arms a variation from 5,7 to 7,9 repetitions for the masculine sex, and from 4,1 to 4,8 for the feminine sex.

The medium difference of the pull-up-test among the masculine and feminine groups varies from 1,3 to 3,5 repetitions. Those results indicate differences significant statistical ( $p < 0,05$ ) in the age group from seven to ten years of age (seven years sig. 0,000; eight years sig. 0,000; nine years sig. 0,000; and ten years sig. 0,000).

When we fell back upon the graph with curves in percentis P10, P50 and P90 for comparison between boys and girls of the present study, we verified that the differences are maintained, demonstrating high acting in the boys' favor (GRAPH 4).



GRAPH 4 Curves of the modified test of bar in school childrens from Manaus (AM), from seven to ten years of age, of both sexes in values of percentile.

In percentile P10 the girls in all of them age obtained acting same to zero, not getting to execute in a satisfactory way the movement demanded in the test. The boys for his/her time, just to the seven years of age they obtained acting same to zero.

In the comparison of the percentis P50 and P90, onlooker to observe that the girls starting from the nine years of age tend to reduce the acting, while the boys maintain the increase of the acting.

#### 30 meter-run test

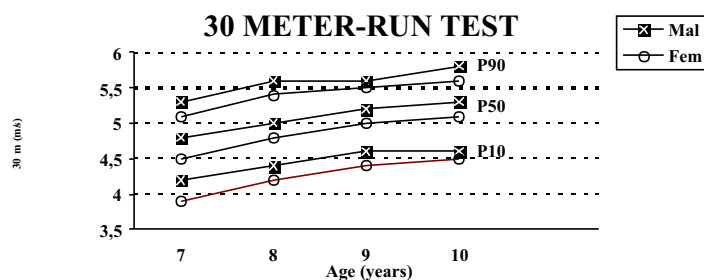
In the present study we opted to apply the 30 meter-run test considering the following criterion: 1) to be applied in any space of the school; 2) to be applied the male and feminine scholars; 3) to measure the capacity motive displacement speed; 4) to be of easy application for the teachers.

Like this, the medium values of the test of race of 30 m demonstrated that the male schoolchildrens performance varies from 4,82 m/s to 5,30 m/s and the feminine sex of 4,55 m/s to 5,1 m/s. Those results evidence the male schoolchildrens better performance.

The medium difference of 30 m being's race the groups vary in agreement with the age group, in other words, to the seven years 0,26 m/s; eight years 0,21 m/s; nine years 0,20 m/s; and 10 years 0,16 m/s. THE difference is small although significant estatisticamente.

Going through the percentis curves P10, P50 and P90 detached the acting difference between boys and girls in agreement with the age group (GRAPH 5).

The curves evidence larger acting in the boys' favor in all of the ages. Another aspect to be considered is the growing increase of the acting for both sexes as the age moves forward. In spite of that, in percentile P10 it happened a discreet acting decrease between the ages of nine and ten years. In percentile P90 it happened discreet decrease of acting from the eight to the nine years following by increase to the ten years of age.



GRAPH 5 - Curves of the 30 meter-run test in school childrens from Manaus (AM), from seven to ten years of age, of both sexes in values of percentile.

#### CONCLUSION

Before the results of the present study that it is objective investigates the variables of motor performance in school childrens of both sexes, in the age group from seven to ten years, in the city of Manaus, State of Amazon, they make possible to compose us the following conclusions:

a) The tests of motor performance (long jump stopped, flexing and extension of arms in suspension in the bar and speed of 30 m), they demonstrate there to be significant differences between boys and girls in the age group from seven to ten years of age.

b) When the results among groups (masculine and feminine) they are compared in agreement with the age group (seven to ten years of age) we observed that the boys' acting is larger than the girls.

c) The body weight, the statistical results demonstrate that in relation to the medium values, there are no significant differences among the groups (masculine and feminine sex) in all of the ages. However, when we used the percentis curves for comparison, we verified that the percentis P10 and P90 appear for differences between boys and girls.

d) The school childrens of the present study stature demonstrates there to be differences significant statistical to the seven, nine and ten years of age. When we fell back upon the use of the percentis curves to verify the behavior of the growth of the scholars amazonenses, we didn't find differences in none of the percentis.

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#### **MOTOR PERFORMANCE OF SCHOOL CHILDREN AMAZONENSES**

##### **ABSTRACT**

The objective of the study was to determine the profile of motor performance children's in the age group from seven to ten years, of both sexes, regularly enrolled in schools of the municipal net of teaching of the city of Manaus. The sample was constituted of 1904 male and 1974 female, selected at random, belonging to twenty schools of the area east of the city of Manaus. The tests of motor performance used were: a) standing long jump test; b) modified pull-up-test; and e) 30 meter-run test. The results of the present study allowed concluding that the tests of motor performance demonstrate significant differences between boys and girls, in most of the tests.

KEY WORD: Motor performance, physical exercise, school physical education

#### **MOTEUR PERFORMANCE DANS LES ÉCOLIERS AMAZONENSES**

##### **RÉSUMÉ**

L'objectif de l'étude était déterminer le profil d'enfants de la performance du moteur dans la tranche d'âge de sept à dix années, des deux sexes, régulièrement enrôlées dans écoles du filet municipal d'apprendre de la ville de Manaus. L'échantillon a été constitué de 1904 mâle et 1974 femme, sélectionné au hasard, appartenir à vingt écoles de l'est de région de la ville de Manaus. Les épreuves de performance du moteur utilisées étaient: un) épreuve du saut en longueur debout; b) a modifié traction en haut-épreuve; et e) course épreuve de 30 mètres. Les résultats de l'étude présente ont autorisé conclure que les épreuves de performance du moteur démontrent des différences considérables entre garçons et filles, dans la plupart des épreuves.

MOTS CLÉS: Performance du moteur, exercice physique, école éducation physique

#### **PERFORMANCE MOTORA DE LOS NIÑOS ESCOLARES AMAZONENSES**

##### **RESUMEN**

El objetivo del estudio era determinar el perfil de niños en la actuación motora en el grupo etario de siete a diez años, de ambos sexos, regularmente se enrollados en las escuelas del precio neto municipal de enseñar de la ciudad de Manaus. La muestra se constituyó de 1904 varón y 1974 hembra, seleccionó al azar, mientras perteneciendo a veinte escuelas del este del área de la ciudad de Manaus. Las pruebas de actuación de motor usadas eran: un) la prueba del salto de longitud en pie; b) modificó el tirar-a-prueba; y e) 30 metro-corrída. Los resultados del estudio presente permitieron concluir que las pruebas de actuación motora demuestran las diferencias significantes entre los muchachos y muchachas, en la mayoría de las pruebas.

PALABRA CLAVES: La actuación de motor, el ejercicio físico, la escuela la educación física

#### **DESEMPENHO MOTOR DE ESCOLARES AMAZONENSES**

##### **RESUMO**

O objetivo do estudo foi determinar o perfil de desempenho motor de crianças na faixa etária de sete a dez anos de idade, de ambos os sexos, regularmente matriculados em escolas da rede municipal de ensino da cidade de Manaus. A amostra foi constituída de 1904 meninos e 1974 meninas, selecionados aleatoriamente, pertencentes a vinte escolas da zona leste da cidade de Manaus. Os testes de desempenho motor utilizados foram: a) salto em distância parado; b) flexão e extensão de braços na barra em suspensão; e c) corrida de 30 m. Os resultados do presente estudo permitiram concluir que os testes de desempenho motor demonstram diferenças significativas entre meninos e meninas na maioria dos testes.

PALAVRAS-CHAVE: Desempenho motor, exercício físico, educação física escolar.