118 - GROWTH, BODY COMPOSITION AND PHYSICAL FITNESS IN SCHOOLCHILDREN AMAZONENSES

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INTRODUCTION

The investigations on the monitorament of the growth, of the body composition and of the children's physical fitness and of the adolescents of the different ethnic groups, they have been receiving great attention for researchers of the area of physical education in our country, because they are identified as some of the most important indicators as for the level and to the existent conditions of health in a same population.

In view of that, it is not so recent the fact of we verify that the variables stature anthropometrics and body weight, they are considered as indispensable attributes in the studies that have as parameter the physical fitness, frequently defined in the literature with several have and meanings, but he/she comes characterized under two slopes or basic forms: a related to the capacities of athletic acting and the other related with the health, including components that can promote the health extensively and to protect the organism against the diseases hipocinétics, as well as providing a healthy base for sporting participation.

In Amazon, he/she became growing the need to establish parameters of references about the growth conditions, body composition and of physical fitness related to the children's health, doing with that investigations were accomplished for (LEÃO, 2005) with scholars of the Area East of the city of Manaus. In this study they stand out the variables of the stature measures, body weight and cutaneous folds in the areas tricipital and subscapular as well as the variables of the tests of modified sit-up, to seat-and-reach and run/walk of 9 minutes, used by the researcher to build tables with normative data and curves of local and national extent for all of the ages of the children manauenses.

In the present study, it was looked for to investigate the behavior of the growth variables and physical fitness related to the children's of the municipal district of Manaus health (AM) Brazil.

METHODOLOGY

A field research was accomplished, tends as instrument the application of the battery of tests of American Alliance for Health, Physical Education, Recreation and Dance. The data of this work were obtained intentionally of a sample stratified random about 12,5% of children with age among seven and 10 years, that frequented 20 of the 58 municipal schools of the area east of the city of Manaus and they assisted the established characteristics for the study, being 1.904 male and 1.974 female totaling 3.878 participants or not of the discipline school physical education, Table 1.

TABLE 1 - Total of the boys sample and girls measured and tested from seven to 10 years, of both sexes, of the municipal district of Manaus - AM.

Age	Boys	Girls	Total
7	419	410	829
8	487	478	965
9	491	569	1.060
10	507	517	1.024
Total	1.904	1.974	3.878

PROTOCOLS

The data of the variables of growth stature and weight, they were obtained according to the standardization of GORDON et al, (1988), the cutaneous folds (tricipital and subscapular) they were obtained according to HARRISON et al standardization, (1988).

To verify the motor acting related to the health, the international standardization was used suggested by the manual of AAHPERD, (1980).

The data were treated estatisticament through the computation program SPSS - Version 11.0. the descriptive statistics was used to demonstrate the calculations with the values of the averages, standard deviation, variation width and when the differences among the sexes were significant, it was appealed analyzes her/it of comparison through the test "t" of Student to locate them. The level of statistical significant was established in $p < 0,05$.

RESULTS

With base in the information of the medium values and of comparison through the test "t" of produced Student of the variables of body weight, stature bends cutaneous tricipital and subscapular described by chronological age in the Table 2. In the variable body weight for the seven eight year-old ages the data showed that, they were not found differences significant estatisticament in the scores obtained among the sexes, we know that in general the children of both sexes of these age groups don't present great differences of body weight. However, in relation to stature variable the seven year-old boys presented larger values than the girls with differences significant estatisticament and in the age groups of nine and ten years the larger values were registered in the girls favor.

As for the information with the data of the measure of thickness of the subcutaneous fabric in the areas tricipital and subscapular very used to determine the subcutaneous fat of deposit, it was observed that the girls demonstrated egg white and evident tendency in presenting larger amount of fat than the boys in both areas with differences significant estatisticament in all of the ages.

TABLE 2 - Comparison of the averages and value of the test "t" of Student of the variables of body weight, stature and fold cutaneous tricipital, subscapular of both sexes from 7 to 10 years of the area east of the city of Manaus.

Sex	Age	Body weight		Stature		Tricipital		Subescapular	
		$\bar{x}$	t	$\bar{x}$	t	$\bar{x}$	t	$\bar{x}$	t
Male Female	7	22,2 22,0	1,00	120,8 119,8	2,67*	7,6 9,1	-8,38*	5,4 6,4	-6,66*
Male Female	8	24,7 24,3	1,51	125,3 124,9	1,00	8,0 9,7	-7,38*	5,9 6,7	-4,69*
Male Female	9	27,4 27,7	-0,83	130,1 131,2	-2,80*	8,5 10,4	-8,10*	6,3 7,3	-4,96*
Male Female	10	29,5 30,1	-1,73	134,4 135,6	-3,13*	8,7 10,6	-8,28*	6,4 7,6	-5,60*

P<0,05*

The Table 3 display the tests of motor acting related to the health through the variables of seat-and-reach, modified sit-up accomplished in the time of 60 seconds and run/walk of 9 minutes between boys and girls. The medium values and of comparison through the test "t" of Student in the variable of seat-and-reach, only presented the boys larger scores in relation to the girls in the eight year-old age with differences significant estatisticament.

However, with base in the results of the test of modified sit-up it was verified that medium values of the boys scores were larger than the one of the girls in all of the age groups with differences significant estatisticament.

In what he/she concerns the results found in the test of run/walk of 9 minutes between boys and girls, it was observed that the medium values revealed larger scores in the boys favor with differences significant estatisticament for all of the age groups.

TABLE 3 - Comparison of the averages and value of the test "t" of Student of the variables: to seat-and-reach, modified sit-up and run/walk of 9 minutes of both sexes from 7 to 10 years of the area east of the city of Manaus.

Sex	Age	seat-and-reach		modified sit-up		run/walk of 9 minute	
		$\bar{x}$	t	$\bar{x}$	t	$\bar{x}$	t
Male	7	24,9	-0,97	17	5,00*	1.292	3,49*
Female		25,2		14		1.238	
Male	8	25,4	2,39*	18	6,68*	1.298	3,63*
Female		24,5		15		1.250	
Male	9	25,2	1,78	20	9,62*	1.319	6,26*
Female		24,6		15		1.236	
Male	10	24,2	1,29	20	11,35*	1.376	7,07*
Female		23,7		14		2.276	

P<0,05*

CONCLUSIONS

In spite of the evolutionary behavior presented in the medium values of the variables that tried to reflect the growth of both sexes, the girls presented significant increases with the age, demonstrating to be higher and heavier than the boys, particularly to the nine and ten years of age. In if treating of the adolescents however, these different growth patterns and development between boys and girls, they are index considered similar to the that have been found in reference studies, because on average the girls have more precocious development than the boys and they possess weight and superior stature even about the thirteen years.

Regarding the indicators of the body composition, that you/they involve the medium values of the cutaneous folds between boys and girls, when compared to the medium values of references, it was observed that the girls demonstrated to be more sensitive in presenting larger accumulation of body fat than the boys, as what has been found in other investigated populations.

In attention to the information of the tests of motor acting related to the health. The analysis revealed significant differences, with high levels of the boys acting in relation to the girls, particularly in the tests of modified sit-up, run/walk of nine minutes and in almost all of the ages in the test of seat-and-reaching. Allowing to infer that, the boys are stronger and more resistant than the girls. When compared with medium values of the studies of references, it was observed that, in a general way the differences among the sexes were favorable to the boys. Except for the test of seat-and-reach, where it is known that the girls are on average more flexible than the boys.

The analysis of the extracted information of this study pointed the percentis values as the most suitable option in the elaboration and construction of normative tables and of curves of local and national extent for all of the ages with the growth variables, body composition and acting motor.

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GROWTH, BODY COMPOSITION AND PHYSICAL FITNESS IN SCHOOLCHILDREN AMAZONENSES, BRAZIL
ABSTRACT

The objective of the study was to investigate the profile of the growth indicators and the behavior of the variables of the physical fitness related to the health, through a traverse approach using a battery of tests of motor acting and of the measures anthropometrics. It was studied a sample of 3.878 subject of both sexes with age among seven to 10 years, selected schoolchildren of the municipal public net of the municipal district randomly in population of Manaus-AM. The results of the variables anthropometrics of the present study between boys and girls indicated there to be differences significant estatisticament in the girls benefit in the stature variables and cutaneous folds and that the same ones are on average more discharges and heavier. As for the comparison of the results in the variables of motor acting the information significant differences were verified in the boys benefit in all of the ages in you pierced them of modified sit-up and in the 9 minutes run/walk and in almost all of the ages in the test to seat-and-reach.

KEY WORDS: Growth, Physical fitness, body composition.

AUGMENTATION, COMPOSITION DU CORPS ET MISE EN FORME DANS LES ÉCOLIERS AMAZONENSES, BRÉSIL.
RÉSUMÉ

L'objectif de l'étude était enquêter sur le profil des indicateurs de l'augmentation et le comportement des variables de la mise en forme été en rapport avec la santé, à travers une approche de la traverse qui utilise une pile d'épreuves de moteur qui agit et de l'anthropometrics des mesures. Il a été étudié un échantillon de 3.878 sujet des deux sexes avec âge parmi sept à 10 années, écoliers sélectionnés du filet public municipal du randomly de district municipal dans population de Manaus Sont. Les résultats de l'anthropometrics des variables de l'étude présente entre garçons et filles indiquées il y avoir des différences estatisticament considérable dans les filles bénéficient dans les variables de la taille et plis cutanés et que les mêmes sont sur moyenne plus de décharges et plus lourd. Comme pour la comparaison des résultats dans les variables de moteur qui joue l'information différences considérables a été vérifié dans les garçons bénéficiez dans tous les âges en vous les a percés d'exercice abdominal modifié et dans le course/promenade de neuf minutes et dans presque tout des âges dans l'épreuve s'asseoir et atteindre.

MOTS-CLES: Augmentation, mise en forme, composition du corps.

EL CRECIMIENTO, COMPOSICIÓN DEL CUERPO Y SALUD EN SCHOOLCHILDREN AMAZONENSES, BRASIL
RESUMEN

El objetivo del estudio era investigar el perfil de los indicadores de crecimiento y la conducta de las variables de la salud relacionado a la salud, a través de un acercamiento atravesado que usa una batería de pruebas de acción del motor y de las antropométricas de las medidas. Se estudió una muestra de 3.878 asunto de ambos sexos con la edad entre siete a 10 años, los niños escolares seleccionado del precio neto público municipal del distrito municipal al azar en la población de Manaus-AM. Los resultados del antropométricas de las variables del estudio presente entre los muchachos y muchachas indicadas para haber diferencias el estatisticament significante en las muchachas benefician en las variables de la estatura y los pliegues cutáneos y que los mismos son por término medio más descargas y más pesado. En cuanto a la comparación de los resultados en las variables de motor que actúa la información las diferencias significantes se verificó en los muchachos beneficie en todo las edades en usted los agujereó de modificó sentar-a y en la carrera/el paseo de los 9 minutos y en casi todas las edades en la prueba para asiento-y-alcanzar.

PALABRAS CLAVE: El crecimiento, la salud, la composición del cuerpo.

CRESCIMENTO, COMPOSIÇÃO CORPORAL E APTIDÃO FÍSICA EM ESCOLARES AMAZONENSES, BRASIL
RESUMO

O objetivo do estudo foi verificar o perfil dos indicadores de crescimento e o comportamento das variáveis da aptidão física relacionada à saúde, por meio de uma abordagem transversal utilizando uma bateria de testes de desempenho motor e das medidas antropométricas. Foi estudada uma amostra de 3.878 sujeitos de ambos os sexos com idade entre sete a 10 anos, selecionados aleatoriamente na população de escolares da rede pública municipal do município de Manaus-AM. Os resultados das variáveis antropométricas do presente estudo entre meninos e meninas indicaram haver diferenças estatisticamente significante em favor das meninas nas variáveis de estatura e dobras cutâneas e que as mesmas são em média mais altas e mais pesadas. Quanto à comparação dos resultados nas variáveis de desempenho motor as informações constataram-se diferenças significantes em favor dos meninos em todas as idades nas varáveis de abdominal modificado, corrida/caminhada de 9 minutos e em quase todas as idades no teste sentar-e-alcançar.

PALAVRAS CHAVE: Crescimento, Aptidão Física, Composição corporal.