185 - EVALUATION OF BMI AND MOTOR HABILITY FROM CHILDREN ON SALON FOOTBALL SCHOOL OF PAROBÉ, RS

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INTRODUCTION

Overweight and obesity are public health problems and in the last years each time more people are suffering from it, either in developed countries, or countries in development. It is important to notice, the bigger the prevalence of excessive body fat during childhood, the biggest are the chances of a child having difficulties on daily tasks, leisure activities, and performance on sports, which can lead in motor difficulties, as well as impaired social interaction

Obesity is the excess of fat in the organism, caused basically by the energectic ingestion of food bigger than the caloric needs of the organism. It is a multifactorial disease that involves genetical susceptibility, psychological and psychosocial factors, habits, and culture (above all the level of physical activity, and sedentarism) (OLIVEIRA, 2000).

On the other hand, we can revert these projections, through studies, researchs, and conscientization of our children, teenagers, and relatives, so that individuals keep a lifestyle were physical activities are performed regularly, adequated caloric intake, among so many other important demands, the benefits on being more physically active will result in a better life quality and in the decrease of mortality in general.

Concerning human movement, excess weight reduces mobility and freedom of movement, however, childhood represents a period of crucial importance to human development. One of the aspects deserving the attention of researchers of this subject is the evaluation of motor development, thus this is the object of study of Physical Education, which has in the body some answers to determined problems, considering the knowledge and learnings coming from that human motricity.

Hence, redeem the “human motricity” appears to us the first step to the “body” reintegration and Physical Education pervaded by this purpose has become means to children experience the different motor potentialities, allied to the benefits of socialization and integration in all their leisure activities.

However, if the child is not yet developed on the maturational aspect to practise any activity demanded, this situation could generate frustrations that will unchain a lack of motivation and repulse to that activity, leading to repercussion in future motor practices.

Being salon football one of the most practiced sports by children, amidst different social levels, where the contact with the ball demands speed, agility, strenght, amongst others, this has instigated the curiosity concerning the subject.

This research targets questions and studies involving overweight and obesity and their effects over the motricity domine of children, believing that diagnosing it on the pupils of salon football schools in Parobé, is of extreme importance to teachers and other sport interested people of this town, so to the intervention bring positive results it is necessary to know the individual, who is the finality of any evaluation and, specially in this study, where the propose is the mobility evaluation and the influence of obesity on the motor development of children.

In this context, the objective of this study was, through motor skills tests, evaluate the motor development of participaring children of the municipal salon football school of Parobé, Rio Grande do Sul, on the morning shift and through the Rosa Neto (2002) Motor Development Scale, relate the Motor Age to the respective Chronological Age.

METHODOLOGY

On ehundred and five male students took part on this research, at the age bracket of 7 to 11 years old, all participant of the municiapl salon football school, at the morning shift, in the city of Parobé, Rio Grande do Sul.

This research has been characterized in an exploratory, descriptive and quantitative study.

The data collection is based on Motor Development Scale from Rosa Neto (2002) to check the basic elements of children's motor ability: fine motor coordination (eyes and hands); global motor coordination; stability (static posture); body scheme (posture copy and speed); spacial organization (spacial perception); temporal organization (language and temporal structures) and laterality (hands, eyes and feet). Also to measure the stature and body weight, checking against the BMI table (Body Mass Index) from WHS. This test was applied between the months of August to November. The tests applied followed the order described previously.

It was used the descriptive statistic. From that a histogram of the basic elements of the children's psychomotricity and BMI can be drawn, which were the tools used on this research.

It were collected the measurements of weight, stature and motors test battery, following the rules and standard procedures cited by Stolarczyk, 2000.

The tools were:

Data collect specification sheet.

To collect the stature measurement: a metric tape attached to the wall, with 0.1 mm accuracy.

To collect the body mass measurement: a scale for weighing brand Welmmy; style 110, with 100 g of accuracy.

It was necessary some support materials to execute the proofs:

Fine Motor Skill: 6 cubes of 2.5cm; thread no. 60; seam needle (1cmx1mm); a shoe lace of 45 cm, sexagesimal chronometer; tissue paper; rubber ball or tennis ball with 6 cm diameter; white carton, pencil no. 2; eraser and white paper sheets.

Global Motor Skill: bench of 15 cm high; 2 m rope; elastic; support to jump; a match box and a chair with 45 cm high.

Stability: bench of 15cm high and sexagesimal chronometer.

Body Scheme: pencil no. 2 and sexagesimal chronometer.

Spacial organization: board with three geometrical forms; sticks of 5cm to 6cm length, 1 rectangle and 2 triangles of carton, 3 cubes from different colors and pictures puppet.

Temporal Organization: sexagesimal chronometer and pencil nº2.

Laterality: ball, scissors, carton with 15cmx25 cm with a center hole with 0,5cm of diameter and a pipe of carton.

RESULTS

PICTURE 1 Average of total sample (weight, stature, BMI e MDS).

	Students	Kg	High	BMI	FMS	GMS	ST	BS	SO	TO
7 years old	20	25,50	1,24	16,53	92,10	98,10	102	89,70	90	91,20
8 years old	20	27,41	1,29	16,61	104,1	108,9	116,1	107,1	106,2	103,1
9 years old	20	32,66	1,34	18,06	115,2	118,2	123,3	117,3	117,9	116,7
10 years old	15	37,93	1,42	18,65	124,8	128	128,8	126,8	124,8	124,4
11 years old	21	43,40	1,43	21,10	130,6	131,4	131,7	132	131,1	130,8
General Average	**96**	**33,38**	**1,34**	**18,19**	**113,4**	**116,9**	**120,4**	**114,6**	**114**	**113,2**

Analyzing the table above we realize that the weight and height were inside the values considered ideal, resulting in a "normal" BMI according to the WHS table. The values found at the MDS were in general above the chronological age in all aspects (FMS, GMS, ST, BS, SO, TO).

PICTURE 3 Percentual average of MDS of the total sample.

	STUDENTS Nÿ	NORMAL MEDIUM	NORMAL HIGH	SUPERIOR
7 y. o.	20 students	5	14	1
8 y. o.	20 students	6	14	
9 y. o.	20 students	11	9	
10 y. o.	15 students	15		
11 y. o.	21 students	21		
Total	96 students	58	37	1
General average	**100%**	**60,42 %**	**38,54 %**	**1,04%**

We have started our analysis by the total average obtained in the MDS of the sample where prevailed the classification "normal medium", denying the study conducted by FRANCESCHI (1997), where the salon football players were classified in "normal low", but we highlight a previous sample, with a smaller age variation.

Yet BATISTELLA, (2001), on his research with 200 scholars has obtained the same classification of this current study, with predominance in "normal medium".

PICTURE 4 - Percentual of laterality in relation to the general total sample

	STUDENTS	RIGTH	LEFT	CROSSED
7 y.o	20	12	4	4
8 y.o	20	13	6	1
9 y.o	20	15	4	1
10 y.o	15	12	2	1
11 y.o	21	13	5	3
Total	96	65	21	10
General average	**100%**	**67,70%**	**21,90%**	**10,4%**

In laterality we have found in the group of children a strong predominance of the "right complete" laterality, presented on the total of the individuals representing 67.70% of the total sample, and remaining only 21.90% children for "left complete" and 10.4% "crossed". This same predominance is found in OLIVEIRA, (2003), and again in FRANCESCHI, (1997).

FINAL CONSIDERATIONS

We can verify in this research work that the BMI and motor development of a child is influenced by diverse factors. Some are related to genetic origins, while others point to alimentary habits and sedentarism, that is also hereditary in certain ways, but in this study the main inquiry was to co-relate the body weight with the motor development of a child.

The BMI and motor skills evaluation has proved of great importante to the pupils studied, and Physical Education has assumed an important role concerning body movement and health of a child.

Salon football requires sensible teachers, who respect the principles of biological maturation of children, in a way that is possible to keep developing the basic element that guides to healty and well oriented physical activity.

The results of this study demonstrate a prevalence of normal BMI and those who presented changes had no difficulties executing the motor skill tests. The study also presented precocity on the motor age of the children attending the municipal salon football school of Parobé, probably because they are physically active, under training of high exigence of motor skills, so requested by this sport. All of this were relevant factors to the good performance on the battery of tests applied on this study.

Based on these studies we can affirm that even overweighed and obese children may reach a good level of motor development, being sufficient to that a continuous motor stimulation, according to their limits, making them each day more prepared to participate on their living environments, reassuring the question that before beginning classes the teacher must execute a motor skill evaluation in his group of pupils, to the good course and planning of his classes.

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EVALUATION OF BMI AND MOTOR HABILITY FROM CHILDREN ON SALON FOOTBALL SCHOOL OF PAROBÉ, RS.

This study aims to evaluate the motor abilities and relate them with the BMI of male children between the ages of 7 to 11 years old registered on salon football school of Parobé city, Rio Grande do Sul, Brazil. The research took place at the municipal gymnasium of sports, and had a descriptive cross sectional approach. Ninety six male students were part of this research. This sample was stratified by gender and age bracket. The tool used was the Motor Development Scale from Rosa Neto (2002). This study was accomplished with children attending the gymnasium at different time than classes. After getting the Free and Cleared Term of Consent the research took place. Through this research it was concluded that the total of children that are with medium BMI, about 18 and 19 belonging to the group of 9 years old classified according to the WHS table, classified by the Motor Development Scale MDS (ROSA NETO, 2002) as 60.42% regular medium, 38.54% regular high and 1.04% superior, which means, even overweight and obese children reached a good level of motor development. The laterality obtained was 67.70% for right handed, 21.90% for left handed and 10.4% for cross laterality, prevailing the right handed dominance. The results of this study have shown precocity on the motor age of these children.
Keywords: Body Mass Index Motor Ability Children

ÉVALUATION DU IMC ET DES APTITUDES MOTRICES EN ENFANTS PARTICIPANTS DE L'ÉCOLE DE FOOTBALL DE SALON DANS LA VILLE DE PAROBÉ, RS.

Cette étude a comme objectif d'évaluer les aptitudes motrices et rapporter avec l'Indice de Masse Corporelle (IMC) du sexe masculin parmi 7 et 11 ans, matriculés dans l'école de football de salon de la municipalité de Parobé, Rio Grande do Sul, Brésil. La recerche a été réalisé dans le gymnase sportif municipal, de cette ville avec un abordage descriptif de délinéament transversal. L'amostrage de la recherche a été composé pour 96 élèves, tous du sexe masculin. Cette amostrage a été stratifiée pour genre et gamme d'âge. L'instrument utilizé a été l'echelle de developpement motrice de Rosa Neto (2002). Cette étude a été realisé avec des enfants qu'était dans le lieu établi en horaires distincts des classes. Après avoir obtenu le terme de agrément franc et éclairé, la recherche a été réalisé. À travers de cette recherche on avait conclu que, le total des enfants étudié sont dans le IMC moyen de 18, 19 en appartenent a le groupe des 9 ans, classifiés d'accord la table de l'OMS et classifiés pour l'Écale de Développement Motrice ECM (ROSA NETO, 2002), comme 60,42 normal moyen, 38,54% normal haut et 1,04% supérieur, ça veut dire que même les enfants avec surcharge et obesité, aient attendu un bon niveau de devéloppement motrice. La latéralité obtenue a été 67,70% pour les droites, 21,90% pour les gauches et 10,40% pour latéralité croisé, en prédominent la dominance droite. Les résultats de cette étude démonrtent une précocité dans l`^age motrice de ces enfants.
Mots-clé: indice de masse corporelle aptitude motrice enfants.

EVALUACIÓN DE LO INDICE DE MASA CORPORAL Y DE LAS HABILIDADESS MOTRICES DE NIÑOS PARTICIPANTES DE LA ESCUELA DE FUTSAL DE LA CIUDAD DE PAROBÉ, RS

Este estudio tuve por objetivo evaluar las habilidades motrices y relacionar con lo IMC de los niños con edad entre 7 y 11 años, matriculados en la escuela de futsal de la ciudad de Parobé/RS, Brasil. La pesquisa fue hecha en lo gimnasio municipal de deportes de la misma ciudad y tuve una abordaje descriptiva con delineamiento transversal. Hicieran parte de esta pesquisa una amostrá con 96 alumnos, todos de lo sexo masculino. Este muestreo fue estratificado por género e edad. Lo instrumento utilizado fue la escala de desarrollo manual de Rosa Neto (2002). Este estudio fue realizado, con niños que estaban en lo local establecido en horarios distintos de las das clases. Después de obtenernos lo termo de consentimiento libre y esclarecido, hicimos la pesquisa. A través de esta pesquisa se concluyo que los totales de los niños estudiados están con lo IMC medio de 18,19 perteneciente a lo grupo de los 9 años, clasificadas de acuerdo con la tabla de la OMS e clasificadas por la Escala de Desarrollo Motor EDM (ROSA NETO, 2002), como 60,42% normal medio, 38,54% normal alto e 1,04% superior,o sea, mismo los niños con sobrepeso y obesidad, tuvieran un bueno nivel de desarrollo motriz. La lateralidad obtenida fue 67,70% para diestro, 21,90% para izquierdo y 10,4% para lateralidad cruzada, prevaleciendo la dominación diestra. Los resultados de este estudio demostraran una precocidad en la edad motriz de estos niños.
Palabras llave: indice de masa corporal habilidad manual niños.

AVALIACÃO DO IMC E DAS HABILIDADES MOTORAS EM CRIANÇAS PARTICIPANTES DA ESCOLINHA DE FUTSAL DO MUNICÍPIO DE PAROBÉ, RS.

Este estudo teve como objetivo avaliar as habilidades motoras e relacionar com o IMC das crianças do gênero masculino com as idades entre 7 e 11 anos, matriculados na escolinha de futsal do município de Parobé/RS, Brasil. A pesquisa foi realizada no ginásio municipal de desporto, desta cidade, e teve uma abordagem descritiva de delineamento transversal. Fez parte desta pesquisa uma amostra de 96 alunos, sendo todos do sexo masculino. Esta amostragem foi estratificada por gênero e faixa etária. O instrumento utilizado foi o a escala de desenvolvimento motor de Rosa Neto (2002). Este estudo foi realizado, com crianças que estavam no local estabelecido em horários distintos aos das aulas. Depois de obtido o termo de consentimento livre e esclarecido, realizou-se a pesquisa. Através desta pesquisa concluiu-se que, os totais das crianças estudados estão com o IMC médio de 18,19 pertencendo ao grupo dos 9 anos, classificadas de acordo com a tabela da OMS e classificadas pela Escala de Desenvolvimento Motor – EDM (ROSA NETO, 2002), como 60,42% normal médio, 38,54% normal alto e 1,04% superior,ou seja, mesmo as crianças com sobrepeso e obesidade, alcançaram um bom nível de desenvolvimento motor. A lateralidade obtida foi 67,70% para destro, 21,90% para sinistro e 10,4% para lateralidade cruzada, prevalecendo a dominância destra. Os resultados deste estudo demonstram uma precocidade na idade motora destas crianças.
Palavras chaves: índice de massa corporal – habilidade motora - crianças.