127 - BODY IMAGE EVALUATIONS OF ADOLESCENTS.

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INTRODUCTION

The modern world has a society disposed to have inadequate life habits, mainly in the adolescence, according to indicate some human development authors (ZAGURY, 1997; PAPALIA; OLDS, 2000). Adolescence is the phase of hormonal transformations that culminate in the premature arrival of the adult stature and of the sexual maturity. In function of these transformations the adolescents' corporal image can suffer distortions.

Human body image is the figuration of our bodies formed in our mind, which is the way that our body comes for ourselves (SCHILDER, 1994). Nowadays, the vision of the ideal human body is that with the smallest amount of fat and larger possible muscular mass, image that the media presents to us all of the moment. So those that don't fit in this "ideal" profile of beauty feel extremely unsatisfied. In this universe of people a very vulnerable group is that composed by the adolescents.

The dissatisfaction with the body image until recently was considered a problem that afflicts the feminine universe, though a growing number of boys and men are unsatisfied with theirs bodies (HUMPHREYS; PAXTON, 2004).

Studies accomplished by Peterson (2003) indicated that to understand how the adolescents notice their bodies can have practical consequences, because professionals of health can deal with the questions about the body dissatisfaction aiding the youths to avoid inadequate health behaviors and to reduce the risks of diseases associated to the obesity or to the low weight.

In the understanding of Schilder (1994), the interest and attention of the peoples that surround us to carry out a lot of influence in the elaboration of our corporal image, what takes us to conclude that in the process of image structuring the experiences and sensations obtained by actions and reactions of the other people in our social relationships are very important for the process of its construction.

In that conception everything indicates that the relationships with the growth variables, body composition, motor development, alimentary habits and body image tend to be more and more studied for scientists of the health area.

Due to those considerations, this work, of descriptive character (LAKATOS; MARCONNI 1991), had as objective to evaluate the body image of the high school students from both Public and Private Schools from Loanda-PR.

METHODS

- Population and sample

Total High School population in Loanda/PR was composed by 1,038 students. Two hundred and eight adolescents (92 male and 116 female) took part in the study. Participants were from high school years: 14 (n = 91), 15 (n = 50), 16 (n = 36) and 17 (n = 31). Adolescents were selected from four Public School (n = 131) and two Private School (n = 77), that corresponded to all High School in the city. The students' distribution according to the age and sex is presented in the Table 1.

The study was approved by the Ethics Committee from the Maringá State University - UEM (Protocol Number 051/2005). Informed consent was gained from parents/guardians. Individual participants within each school were selected randomly in the classrooms.

Table 1. Adolescents' distribution according to the age, sex and kind of school.

Years old	Private Schools				Public Schools			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
14	06	3	14	7	28	13	43	21
15	11	5	13	6	10	5	16	8
16	10	5	7	3	10	5	9	4
17	09	4	7	3	08	4	7	3
Total	**36**	**17.31**	**41**	**19.71**	**56**	**26.92**	**75**	**36.06**

- Methodology

a. Body Image Evaluation

Body image was evaluated with aid of the Complete Body Silhouettes Illustrations (Figure 1) proposed by Stunkard, Sorensen and Schulginde (1980 apud TRITSCHLER, 2003). Each adolescent participant of the research, in agreement with its sex, received a leaf contends several silhouettes representing several body sizes that varied of the extremely thin (1) to the extremely fatty (9), in a total of nine illustrations, and, for each one of them it was requested that marked the illustration that more resembled with yourself.

For a better understanding, the silhouettes illustrations were named with the BMI classification proposed by the NCHS/CDC (2000), that is: (a) malnutrition - illustrations 1 and 2; (b) malnutrition risk - illustration 3; (c) eutrophic - illustrations 4 and 5; (d) overweight risk - illustration 6 and, (f) obesity - illustrations 7, 8 and 9.

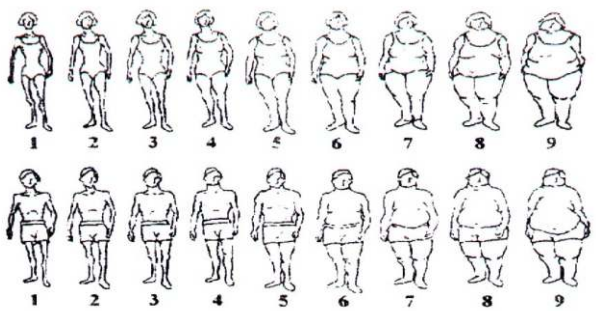


Figure 1. Complete Body Silhouettes Illustrations proposed by Stunkard, Sorensen and Schulginde (1980 apud TRITSCHLER, 2003).

b. Anthropometric Evaluation

The weight (Kg) was measured with a scale (ARJA) being the adolescent with school uniform, and the stature (meter) was measured with aid of the stadiometer of the scale and the adolescents were without shoes and looking straight ahead in Frankfurt position. Those two variables were used to calculate the Body Mass Index (BMI) (Kg/m^2) that was used for the evaluation of the adolescents' nutritional status according to NCHS/CDC (2000) propositions [(a) malnutrition = lower than 3rd percentile; (b) malnutrition risk = from 3rd to 10th percentiles; (c) eutrophic = from 10th to 85th percentiles; (d) overweight risk = from 85th to 95th percentiles and, (e) overweight = upper than 95th percentile].

- Statistical treatment

The results received a descriptive statistical treatment and the averages were compared by the test *t* of Student, in a 5% level of significance. Data were statistically analyzed with Microsoft Excel Program and Statistica Program.

RESULTS AND DISCUSSION

The results demonstrated that the image that the adolescents presented by themselves it is the one of a quite thin person. Most of the adolescents of both groups of schools, was self-evaluated as presenting malnutrition risk (illustration 3) or malnutrition (illustrations 1 and 2), to know: 66,66% of the boys of the private schools and 76,19% of the public ones and 80,49% of the girls of the private schools and 81,94% of the public ones. On the other hand, no student of both sexes was self-evaluated with obesity and, only, 3,33% of the boys of the private schools was self -evaluated with overweight risk (illustration 6) (Table 2).

This result could reflect two situations: (1) because of the dissatisfaction with their *real* images many of the adolescents have marked those illustrations corresponding to the *desired* images, so the results would reflect a distortion of the body image in relation to the nutritional status, or (2) the population presented good perception of the body image and self-evaluated in a correct way according to its nutritional status.

In order to understand the results, it was made the evaluation of the adolescents' BMI, which was used to identify the nutritional status of the group. These results are presented in Table 3.

Table 2. Silhouette Body Image self-evaluation for the adolescent from the Public and Private Schools of Loanda-PR.

Sex	Illustrations 1+2 (malnutrition) (%)	Illustration 3 (malnutrition risk) (%)	Illustrations 4, 5 (eutrophic) (%)	Illustration 6 (overweight risk) (%)	Illustrations 7, 8, 9 (overweight) (%)
Private School					
Male	16.66	50.00	30.00	3.33	0.0
Female	36.59	43.90	19.51	0.0	0.0
Public School					
Male	38.90	38.10	23.81	0.0	0.0
Female	36.11	45.83	18.06	0.0	0.0

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The results demonstrated that, for both sexes and school type, the weight was the variable that presented more variation among the groups (larger standard deviation) while the stature was quite homogeneous (smaller standard deviation). The Private Schools girls presented weight, stature and BMI higher than those of the Public Schools girls ($p < 0,05$). Among the boys there was not significant difference among the two groups. It was also verified, that the BMI differences verified with the age were significant for both sexes and for the two groups of schools.

Table 3. Anthropometric evaluation of both Public and Private Schools adolescents of Loanda/PR.

	n	Years		Weight (kg)		Height (m)		BMI (kg/m^2)	
		Media	SD	Media	SD	Media	SD	Media	SD
Private School									
Female	37	15.24	1.12	59.54	11.02	1.67	0.08	21.26	2.59
Male	33	15.64	1.08	59.85	11.93	1.67	0.09	21.21	2.62
Public School									
Female	79	14.79	0.95	54.22	8.68	1.63	0.09	20.33	2.35
Male	59	15.05	1.06	58.54	11.02	1.67	0.09	20.98	2.99
Total									
Female	116	14.94	1.02	55.92	9.76	1.64	0.09	20.63	2.46
Male	92	15.26	1.10	59.01	11.31	1.67	0.09	21.06	2.84

The analysis of the nutritional status in according with the BMI had demonstrated that all the adolescents of both sexes and groups of schools were classified as eutrophics, because they presented BMI in a percentile superior than the 10th and inferior than the 85th, in the understanding of National Centers of Health Statistics (NCHS/CDC, 2000).

This result takes us to affirm that the adolescents evaluated, although nutritionally eutrophics, presented a distorted body image from the reality and, differently of other researches accomplished by these researchers (NETTO OLIVEIRA; OLIVEIRA, 2004), the great majority has been self noticing thinner than he/she really was. We don't have arguments to affirm if this result is the reflex of a desire in being thin or, if the adolescents really considered themselves a thin person. The answer to that subject is very important because, independently of being one or other case, it can take the group to the acquirement of unhealthy habits and a not very good alimentary behavior.

If the adolescents were self-evaluated themselves with thinner images than the reality because they want to be thin it can be inducing them to the adoption of radical techniques of the weight control, like as very hipocaloric diets and compulsive exercises (DUNCAN et al., 2004). On the other hand, if they are considering themselves thinner than they really are, this can be giving them an illusory safety that they might abuse of the caloric foods, because they are falsely protected by an image that they believe to have of a subject thinner than they really are. This behavior in the both medium and long period can be associated with the increase of the overweight risk and obesity among the adolescents.

A distorted body image is also a sign of low self-esteem, because when the self-esteem is healthy the person accepted themselves as they really are and don't submit their body to the tendency of the environment (ROSE, 2004).

Maltz mentioned by Andrade (1999), says that the acquisition of a realistic and appropriate self-image seems give to the person new abilities, new aptitudes and, literally, to transform the failure in success, changing the personality and the

individual's behavior.

The adolescence is the period in which the body appearance more determines the acceptance or not in the group. This happens in a period in that the need to be well sees and to be accepting is vital for the personality development (VIUNISK, 2004).

The importance of the positive emotions in the people's health and the damage of the negative emotions, the depression stress and the solitude isolation have been demonstrated. To be happy with you and with the other ones living positive emotions, it is the best antidote against the diseases. Appropriate incentives, in quantity and in quality, will be the emotional food that will help the new generations to fight for the constant self improvement, getting to be happy and accomplished adults (ANDRADE, 1999).

FINAL CONSIDERATIONS

Differently than it was initially waited, based in another authors' works, the adolescents here evaluated didn't consider themselves fatter than they really were, on the contrary they were self-evaluated very thin, when in fact they were eutrophics.

This sub-estimation of the real body image could have been originated in their desire to be presented like a thin person in their society.

Besides, no student has been evaluated with overweight or obesity, in agreement with the method employed the fact of they self consider thinner than they really are can favor the acquisition of not very healthy life habits like as the physical inactivity and an unbalanced diet, which can predispose them to the excess of corporal weight.

Therefore, it is necessary educational measures that join in an only effort the actions of the parents, of the health professionals, particularly the physical educators, and of the school, to promote the self-esteem and the incorporation of concepts and appropriate life habits to the adolescence, because, disturbances of body image in children and youths can be a risk factor for the development of foods disorders.

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BODY IMAGE EVALUATIONS OF ADOLESCENTS.

Abstract: Children and adolescents are more and more vulnerable to weight disturbances such as obesity and low weight. Thus, this work had as objective to evaluate the form that adolescents from public and private High Schools self-evaluated their body image with aid of silhouette illustrations. The sample was composed by 20% of the 14 to 17 years old students from public (131 students) and private (77 students) schools of Loanda/PR, totalizing 208 adolescents. It was used a questionnaire with body image silhouettes in which the adolescent indicated that one which more identified with herself or himself. The weight and stature, for the calculation of BMI, were collected during the Physical Education classes and the nutritional status was evaluated in agreement with NCHS/CDC (2000). The results indicated that although all the students were classified as euthrophic, in the public schools 76,19% of the male and 81,94% of the female self-evaluated themselves with low weight, while in the private school these results were, respectively, 66,66% and 80,49%. The results pointed the need of teachers and health professionals to work the self-acceptance of the body image, the self-esteem and the practice of healthy habits with this group of people whose body image and habits are so influenced by the media.

Key-words: Body image, adolescents, anthropometry.

ÉVALUATIONS DE L'IMAGE DU CORPS D'ADOLESCENTS.

Résumé: Les enfants et adolescents sont de plus en plus vulnérables pour problèmes de poid tel qu'obésité et poids bas. Donc, ce travail avait comme objectif évaluer la forme que les adolescents de les ecòles public et privés ont auto-évalué leur image du corps avec aide d'illustrations de la silhouette. L'échantillon a été composé par 20% des étudiants avec 14-17 années des écoles public (131 étudiants) et privé (77 étudiants) de Loanda/PR, totaliser 208 adolescents. Il a été utilisé un questionnaire avec silhuèttes de image du corps dans que l'adolescent a indiqué celui-là qui plus identifié avec elle ou lui. Le poids et taille, pour le calcul de BMI (l'Indice de Masse Coporelle), ont été rassemblées pendant les classes de l'Éducation Physiques et les état nutricional a été évalué d'accord le NCHS/CDC protocole (2000). Les résultats ont indiqué que bien que tous les adolescents aient été classés comme normales, dans les écoles publics 76,19% du mâle et 81,94% de la femme se sont auto-évalués avec poids bas, pendant que dans l'école privée ces résultats étaient, respectivement, 66,66% et 80,49%. Les résultats ont pointé le besoin des les parents, les professeurs et les professionnels de la santé de travailler la auto-acceptation de l'image du corps, l'amour-propre et l'entraînement d'habitudes saines avec ce groupe de gens dont l'image du corps et habitudes sont influencées par le média ainsi.

Mot-clefs: Image du corps, adolescents, anthropométrie.

EVALUACIONES DE LA IMAGEN CORPORAL DE LOS ADOLESCENTES.

Resumen: Los niños y adolescentes son más vulnerables a perturbaciones de peso como obesidad y el peso bajo. Así, este trabajo tenía como objetivo la evaluación de la forma que los adolescentes de las escuelas secundarias públicas y privadas auto-evaluaron su imagen corporal con ayuda de ilustraciones de la silueta. La muestra fui compuesta por 20% de los estudiantes de 14-17 años de las escuelas públicas (131 estudiantes) y privadas (77 estudiantes) Loanda/PR, totalizando 208 adolescentes. Se usó una encuesta con imagen corporal presenta en silueta en que el adolescente indicó ese uno que más identificado con ella o él. El peso y estatura, para el cálculo de BMI, fueran reunidos durante las clases de Educación Físicas y el estado nutricional se evaluó en acuerdo con NCHS/CDC (2000). Los resultados indicaron que aunque todos los estudiantes fueron clasificados como normales, en las escuelas públicas 76,19% de los adolescentes y 81,94% de las adolescentes se auto-evaluaron con peso muy bajo, mientras en la escuela privada estos resultados fueron, respectivamente, 66,66% y 80,49%. Los resultados apuntaron la necesidad de padres, maestros y profesionales de la salud trabajaren la auto-aceptación de la imagen del cuerpo, la autoestima y la práctica de hábitos saludables con este grupo de personas cuyos la imagen del cuerpo y hábitos son tan influenciados por los medios de comunicación.

Palabras clave: Imagen del cuerpo, adolescentes, antropometría.

IMAGEM CORPORAL PELA SILHUETA DE ADOLESCENTES.

RESUMO: Crianças e adolescentes estão cada vez mais vulneráveis a distúrbios com o peso, tais como obesidade e baixo peso. Assim, este trabalho teve como objetivo avaliar a forma com a qual adolescentes do Ensino Médio das escolas públicas e privadas auto-avaliavam sua imagem corporal com auxílio de figuras de silhueta. A amostra foi composta por 20% dos alunos de 14 a 17 anos de idade matriculados nos colégios públicos (131 alunos) e privados (77 alunos) de Loanda/PR, totalizando 208 adolescentes. Foi empregado um questionário contendo imagens de silhuetas corporais no qual o adolescente assinalou aquela com a qual mais se identificava. Peso e estatura, para o cálculo do IMC, foram coletados durante a aula de Educação Física e o estado nutricional foi avaliado de acordo com NCHS/CDC (2000). Os resultados indicaram que, apesar de todos os alunos se apresentarem eutróficos, na escola pública 76,19% dos adolescentes do sexo masculino e 81,94% dos do sexo feminino se auto-avaliaram com baixo peso, enquanto na escola privada estes resultados foram, respectivamente, 66,66% e 80,49%. Os resultados destacam a necessidade de pais, professores e profissionais da saúde, trabalharem a auto-aceitação da imagem corporal, a auto-estima e a prática de hábitos saudáveis com esta geração cuja imagem corporal e hábitos são tão influenciados pela mídia.

Palavras-chave: Imagem corporal, adolescentes, antropometria.