Matching schoolars body-image self-perception with their parents percepted image

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Introduction: The mother, managers and caregivers play an important role in the recovery, maintenance, disease prevention and protection of child health (Chuproski & Mello, 2009). The feeding practices adopted in childhood have been regarded as entirely dependent on parents, especially on mother's behaviors, decisions and perceptions (Kroke, Strsthmann, & Günther, 2006). The maternal behavior is identified as a key in the development of behavior and food preferences, in the regulation of energy intake and physical activity patterns of children (May et al., 2007). The adequate mother's perception of her child's weight may be a requirement for seeking professional expertise and for adherence to appropriate treatment (Boa-Sorte et al., 2007). Objective: To compare the perception of parents or guardians with the perception of body image in students of elementary education at a private school in the city of Botucatu- São Paulo. Methods: A cross-sectional sample non-probabilistic (convenience). We evaluated 272 children and teenagers aged 8 to 15 years (mean 11.4 ± 2.0 years) and 148 boys and 124 girls from 4 to 9 years of basic education in private school education, Botucatu-SP. The study included all students enrolled in the school who were present on the days stipulated for data collecting and who presented the term of consent signed by their responsible, prepared in accordance with resolution 196/96 on "Research involving humans, Board of Health, Ministry of Health." The study was approved by the Ethics in Research of the Faculty of Medicine of Botucatu in July 6, 2009 under No. OF.

287/2009-CEP. The first step was to look in the literature for body image scales validated for this population. The second stage consisted in a pretest in a group of 25 students (Median 8-14years) participating in a university extension project called "Healthy Recreation", held in that same school. The pretest aimed to present validated scales of body image and to analyze the receptivity of children. Soon after presentation, the children reported the scale that best represented them. Despite the existence of a Brazilian scales (Campana, 2007; Contil, 2009), most children in this group preferred the scale "Children's Figure Rating Scale of Tiggemann and Wilson-Barrett (1998). This scale was not validated for the Brazilian population, but was used by Triches and Giugliani (2007) in studies in southern Brazil with children 8-10 years. Due to the preference for children in pre-test heed to "Children's Figure Rating Scale as a scale for this study. The study was developed by evaluation of parents or guardian's perception, self-perception of body image and measurements of children. The perception of body image was obtained by self-administered questionnaire using a scale with nine silhouettes (Tiggemann & Wilson-Barrett, 1998) together with the following questions: "Which silhouette looks most closely like your appearance?" "Which silhouette would you prefer to look like?" Dissatisfaction with body image was assessed through the discrepancy between real and ideal profile silhouette. If variation was equal to zero, children and adolescents were classified as satisfied; if not zero, as dissatisfied. If the difference was positive, it was classified as dissatisfaction with the excess of weight (desire to decrease the size of the silhouette) and when negative, dissatisfaction with thinness (desire to increase silhouette). The same questions, with necessary adjustments and additional questions relating to concerns about the weight of their children were sent to parents or guardians of the students. Anthropometry consisted of measurement of body weight (electronic scale platform type - Filizola ®), height (stadiometer SECA ®) following the standards proposed by the World Health Organization (WHO, 1995). The triceps skin fold thickness (TSF) and subscapular skin fold (SSF) were measured three times with the caliper (Lange ®) on the right side, considering the final result the arithmetic mean. The percentage of body fat (% BF) was estimated by the equation of Lohman (1986), which considers the measures of subscapular and triceps skin folds, age, sex, and race of the

subject, using the formula 1.35 x (triceps + subscapular) -0.012 x (triceps + subscapular) ² - (Value according to gender, age and race). The values adopted for the percentage of body fat were those proposed by Lohman (1987). The agreement between categorical variables of perception of parents or guardians, body awareness of students and % BF was made by Kappa test. In all tests was set the significance level of 5% in the corresponding p-value. All tests were performed by SAS for Windows 9.1.3. Results: 17 patients were excluded from the study for not meeting all stages of the study, so the research was composed of 255 children and adolescents (54% boys) who participated in the assessments and answered the questionnaire in school corporal self-image. Regarding the questionnaire sent to parents or guardians, only 140 questionnaires were returned, and the return of boy's questionnaires was 15% higher compared to girl's. According to BF% criterion, 57% of boys were classified as normal, while 53% of girls were classified as moderately excessive or excessive. When guestioned about the weight by the written scale (very thin, thin, normal, chubby, fat), there was no correlation between the answers of children and of their parents or guardians (0.4184). The same happened in the correlation between the answer of children (0.1806) and of and their parents or guardians (0.2748) about percentage of body fat. There was no concordance between the answers of children and of their parents or guardians (0.3864) regarding the choice of the actual profile. The same happened in the correlation between the answers of children (0.1564) and their parents or guardians (0.2271) about body fat percentage. There was no agreement between the responses of children and their parents or guardians (0.1559 about the ideal profile). The same happened in the correlation between the answer of children (0.0835) and their parents or guardians (0.089) about body fat percentage. Conclusion: The lack of agreement in the awareness of appropriate weight by children and by their parents or guardians may be a cause of difficulties in correct recognizing of nutritional abnormalities and reconstruction of health practices.

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References:

Boa-Sorte, N., Neri, A.L., Leite, M.E.Q., Brito, S.M., Meirelles, A.R., Luduvice, F.B.S., Santos, J.P., Viveiros, M.R., & Ribeiro-Jr, H.C. (2007). Percepção materna e autopercepção do estado nutricional de crianças e adolescentes de escolas privadas. *J Pediatr.* 83(4), 349-356.

Campana, A. N. N. B. (2007) *Tradução, adaptação transcultural e validação do "Body Image Avoidance Questionnaire (BIAQ) e do "Body Checking Questionnaire (BCQ)" para a língua Portuguesa no Brasil.* Dissertação de Mestrado, Universidade Estadual de Campinas, Campinas.

Chuproski, P.,& Mello. D.F., (2009). Percepção materna do estado nutricional de seus filhos. *Rev. Nutr.* 22(6), 929-936.

Contil, M.A., Slater, B., & Latorre, M.R.D.O. (2009). Validação e reprodutibilidade da *Escala de Evaluación de Insatisfación Corporal* para Adolescentes. *Rev. Saúde Pública* 43,(3), 515-524.

Kroke, A., Strathmann, S., & Günther., A.L.B. (2006). Maternal perceptions of her child's body weight in infancy and early childhood and their relation to body weight status at age 7. *Eur J Pediatr.* 165 (12), 875-883.

Lohman, T.G. (1986). Applicability of body composition techniques and constants for children and youths. *Exercise and Sports Sciences Review*,(14), 325-357

Lohman, T.G. (1987). The use of skinfold to estimate body fatness on children and youths. *J Phys Educ. Recreat Dance* 58 (9) 98-102.

May, A.L., Donohue, M., Scanlon, K.S., Sherry, B., Dalenius, K., Faulkner, P., & Birch, L.L. (2007). Child-feeding strategies are associated with maternal concern about children becoming overweight, but not children's weight status. *J Am Diet Assoc.* 107(7):1167-1174.

Tiggeman, M., & Wilson-Barrett, E. (1998). Children's figure ratings: relationship to self-steem and negative stereotyping. *Int J Eat Disord.* 23(3):83-88.

Triches, R.M., & Giugliani, E.R.J. (2007). Insatisfação corporal em escolares de dois municípios da região Sul do Brasil. *Rev. Nutr.* 20(2): 119-128.

World Health Organization, (1995). Physical status: the use and interpretation of anthropometry. Geneva, (WHO Technical Report Series, 854).