Body dissatisfaction of teenage students in a small town in Minas Gerais, Brazil

Miranda, V. P. N., Carvalho, P. H. B., Fortes, L. S., Amaral, A. C. S., Filgueiras, J. F., Ferreira, M. E. C.

Dissatisfaction with one's body is a part of body image related to one's attitudes and self-assessment (Cas, 2004; Grabe & Hide, 2006). It can be understood as a negative assessment of one's own body. Dissatisfaction with one's physical appearance may be a consequence of the "negative creation of body image" (Cash, 2004). It can manifest itself by means of a compulsive preference for thinness or the obsession for a body type which is different from the current one (Campana & Tavares, 2009).

The strong distaste for the body present in this situation could be a precursor for the appearance or worsening of a previous clinical status, such as eating disorders, mainly among teenagers (Saikali, Soubhia, Scalfaro & Cordás, 2004). Conti (2008) analyzed the discourses constructed by teenagers and noticed that the "perceptive, affective, cognitive and social aspects are part of the concept of body image."

Social factors, socio-cultural influences, media pressures and the incessant search for a body type associated with accomplishments and happiness may be one of the causes of the alteration in the perception of body image, which may cause dissatisfaction among teenagers (Conti, Frutuoso & Gambardella, 2005). Parting from the hypothesis that teenagers who live in small towns or in the country are more satisfied with their bodies due to the fact that they do not feel as much pressure to adopt current beauty stereotypes (McCabe & Ricciardelli, 2004, Triches & Giugliane, 2007), this study aims to analyze body

dissatisfaction, especially towards the physical appearance of teenagers in a town in the state of Minas Gerais, Brazil. Moreover, it intends to verify the relationship, between gender and the body mass index, with this dissatisfaction. A transversal study was performed with students from public schools in the town of Tabuleiro - MG, a small town with 4,061 inhabitants, located in the "zona da mata" of Minas Gerais, at km 133. The Project was approved by the

Ethics Committee for Research with Human Beings of the Federal University of Juiz de Fora on February 19, 2009, protocol No. 1612.302.2008.

The subjects of this study were teenage students, both male and female, from 15 to 19 years of age, enrolled in schools of the town's public school system. Studying in a public school in the town and being within the age group were the main criteria used to include subjects in the sample studied.

This study was carried out in three stages. On the first day of contact, the students were told about the study by the researcher himself and received a Free and Clarified Consent Term to be signed by their legal guardians. On the second day, the students were submitted to an anthropometric assessment of their stature and body mass for the calculation of the body mass index (BMI) - weight (kg) /height² (m). The values referring to the percentiles 5 for thinness and 85 for overweight and obesity were adopted as BMI classification criteria (*World Health Organization*, 1995). Three groups for BMI classification were created. Group 1 corresponds to BMI values lower than the 5th percentile (17.29); Group 2, between percentile 5 and 85 (25.20); and Group 3, values above percentile 85.

Height was measured with an anthropometer attached to a wall without a floorboard. The subject being measured was barefoot and with their back touching the wall. The students' body mass was verified by means of a digital scale with a G-Tech platform with a 150kg capacity and graded in 100g.

In a third stage, the students answered the BSQ (*Body Shape Questionnaire*) adapted for the Brazilian population by Conti, Cordás and Latorre (2009). In a classroom, the researcher informed the subjects about the questionnaire and the students answered the 34 questions individually with answers varying from 1 (never) to 6 (always). The classification of the results of the BSQ is divided into four levels of body dissatisfaction. Scores below 80 show a lack of dissatisfaction; scores between 80 and 110 show light dissatisfaction; score between 110 and 140 show moderate dissatisfaction; and score equal or above 140 show serious body dissatisfaction.

For the data analysis, the statistical program SPSS v16.0 was used. The student T test was used so as to verify the existence of significant differences between boys and girls. The Tukey *post hoc* variance analysis was chosen to

compare the BMI groups. A level of significance of 95% (p<0.05) was adopted for both.

One hundred and eighty teenagers officially participated in the survey, being composed of 94 (52.02%) females and 86 (47.08%) males. The average age of the students was 16.44 (\pm 1.34). The average value of the BSQ was 61.92 points (\pm 30.83). Stratifying the total score of the BSQ into four groups, based on the classification, it was found that 149 students (82.9%) were free of dissatisfaction, 19 (10.6%) presented a light dissatisfaction, 6 students (3.3%) had moderate dissatisfaction and, lastly, 6 students (3.3%) manifested serious dissatisfaction.

Analyzing the BSQ in regards to gender, it was found that the score for males was 52.81 points (\pm 21.04), but for the females the average score was 70.26 points (\pm 35.76). This difference was significant (p<0.05) for the T test, with the females being significantly more dissatisfied than the males.

Comparing the three BMI groups, statistically significant differences were found (p<0.05) between groups 1 and 3 (50.55 ± 10.59 and $81.74\pm43,35$) and between groups 2 and 3 (58.92 ± 27.41). In all cases, the group with the higher BMI was significantly more dissatisfied with their own bodies.

Triches & Giugliane (2007) carried out a study with children from eight to ten years old in two cities in the southern region of the country with different demographic densities and they came to the conclusion that a higher body dissatisfaction score was seen in the children from more urbanized areas. However, it was clear that the rural children also had a considerably high dissatisfaction level.

In this paper, we have verified that the general average of BSQ (52.81±21.04) was below 80 points, which is considered the minimum score for a light body dissatisfaction. Nevertheless, further studies must be performed in order to statistically confirm if the individuals in small towns are less dissatisfied with their bodies than those residing in medium-sized and large cities.

Not only the body mass index (BMI) but also the gender showed a significant relationship with body dissatisfaction in this study. Among the females, the greater their body mass the higher the dissatisfaction, while among the males this relationship seemed to be quadratic, demonstrating that the very thin subjects or those with an excess of weight presented more tendency to develop

body dissatisfaction. Most of the males presented a BMI considered normal (percentile between 5 and 85), which justifies the low dissatisfaction scores.

It can be concluded that some teenagers presented a serious dissatisfaction with their own physical appearance, demonstrating that not only those who live in large centers are subject to excessive body dissatisfaction. More studies would be important to better assess the sources and consequences of this dissatisfaction in teenagers, verifying whether the demographic area interferes in dissatisfaction levels, taking into account family influence as well as physiological and socio-cultural factors. Therefore, parents, teachers and health professionals must be attentive to the high prevalence of body dissatisfaction in teenagers in general, so as to see the need to create strategies which seek to ease the incidence of eating and dysmorphic disorders during this phase of human development.

References

Hart, E. A. (2003). Avaliando a imagem corporal. In: Tritschler, K. (org.). *Medida e avaliação em Educação Física e esportes de Barrow & McGee*. Barueri: Manole.

Smolak, L (2004). Body image in children and adolescents: where do we go from here? *Body Image*, 1, 15-28.

Pinheiro, A. P. & Giugliani, E. R. J. (2006). Body dissatisfaction in Brazilian schoolchildren: prevalence and associated factors. *Revista de Saúde Pública*, 40, 489-496.

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

Conti, M. A., Frutuoso, M. F. P. & Gambardella, A. M. D. (2005). Excesso de peso e insatisfação corporal em adolescentes. *Revista de Nutrição*, 18, 491-497.

Grabe, S. & Hyde, J. S. (2006). Ethnicity and body dissatisfaction among women in the United States: a meta-analysis. *Psychological Bulletin*, 132, 622-640.

Conti M. A. (2008). Os Aspectos que Compõem o Conceito de Imagem Corporal pela Ótica do Adolescente. *Revista Brasileira de Crescimento e Desenvolvimento Humano*, 18(3), 240-253.

McCabe, M.P. & Ricciardelli, L.A. (2004). A longitudinal study of pubertal timing and extreme body change behaviors among adolescent boys and girls. Adolescence,39(153), 145-166.

Cash, T. F. (2004). A "Negative Body Image": Evaluating Epidemiological Evidence. In: Cash, T. F. & Pruzinsky, T. (orgs.). *Body Image: a handbook of theory, research & clinical practice*. Nova lorque: Guilford Press.

Campana, A. N. N. B. C. & Tavares M. C. G. C. (2009). *Avaliação da Imagem Corporal: instrumentos e diretrizes para a pesquisa*. São Paulo, Phorte.

Saikali, C. J., Soubhia, C. S., Scalfaro, B. M., Cordás, T. A. (2004). Imagem Corporal nos Transtornos Alimentares. *Revista de Psiquiatria Clínica*, 31(4), 164-166.

World Health Organization. *Physical status: the use and interpretation of anthropometry.* Report of a WHO Expert Comité. Geneva; 1995. WHO Technical Report Series 854.

Conti, M. A., Cordás, T. A., Latorre, M. R. (2009). A study of the validity and reability of the Brasilian verson of the Body Shape Questionnaire (BSQ) among adolecents. *Revista Brasileira de Saúde Materna Infanti*l. 9 (3): 331-338.