

Body Satisfaction in Teenage Ballet Dancers in the City of Juiz de Fora - MG

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Currently, the studies on body image have become more and more common in literature. Body image can be understood as the mental representation of the body, which encompasses all of the ways a person experiences and conceptualizes his/her own body (Shilder, 1999; Tavares, 2003). It is considered as a multidimensional construct in association with the physical aspects of the body and, with the interrelation of the body with the environment and other people (Cash & Pruzinsky, 2002).

Body image disorders occur in two dimensions: perceptive and attitudinal. The latter is subdivided into four components: affective, regarding the emotions of the physical appearance; cognitive, the investment of physical appearance; behavioral, the adoption of avoidance behaviors and body checking; and general subjective dissatisfaction (Campana & Tavares, 2009). It is also related to general satisfaction/dissatisfaction with one's own appearance, and the body dissatisfaction may be understood as the negative assessment of one's own body (Cash & Pruzinsky, 2002).

In the past twenty years, researchers have intensified their studies, mainly due to evidence that body image dissatisfaction begins at early ages and is strongly influenced by social and cultural aspects (Hart, 2003; Smolak, 2004).

The sports environment may magnify socio-cultural pressures motivated by the ideal of a thin body. Sports which favor low body weight and overvalue aesthetics, using the latter as a criterion for the attainment of good results in competitions, have been indicated in studies in the field as the ones with the highest incidence of body dissatisfaction (LePage & Crowther, 2010).

Studies show evidence that the practice of dance might be associated to a negative body image and ballet classes seem to encourage thinness outside the normal limits, which may cause eating disorders (Ribeiro & Veiga, 2010).

The demands concerning the body end up becoming part of the routine of classical ballet – sustained positions, balance, pointe shoes – and a thin body is something essential in the life of a ballet dancer in spite of the lack of scientific data demonstrating that one must be thin in order to dance (Simas & Guimarães, 2002).

Parting from the hypothesis that the great concern with physical appearance and the constant pressure to keep a low body weight, typical of classical ballet, are factors which lead to body image distortions, this study aimed to analyze the body image dissatisfaction of adolescents who practice classical ballet. In addition, we sought to verify the possible relationships between the BMI and body satisfaction.

We have carried out a transverse study with adolescents who practice classical ballet in private dance schools in Juiz de Fora – MG, which use the same dance teaching methodology. This study is registered in the Ethics and Research Committee on Human Beings of the Federal University of Juiz de Fora under protocol number 0128.0.180.000-10.

The sample was composed of 33 teenage girls between 11 and 17 years of age. All subjects were informed about the study procedures and their legal guardians signed the free and clarified consent term authorizing the participation of their daughters. The subjects had to take ballet lessons at least twice a week to be eligible. Girls whose age was out of the range studied were not included in the sample.

In order to measure the satisfaction and the concerns with their bodies, we used the *Body Shape Questionnaire* (BSQ) originally designed by Cooper, Taylor, Cooper and Fairburn in 1987 and validated for the Brazilian population of adolescents by Conti, Cordás and Latorre (2009). The questionnaire is composed of 34 questions, on a Likert scale, in which the person being assessed indicates how often, in the past four weeks, he/she experienced the events proposed in the alternatives. The answers ranged from 1 (never) to 6 (always), and the total score was calculated based on the points attained for each item. 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 *slight* dissatisfaction; scores between 110 and 140

show *moderate* dissatisfaction; and scores equal or above 140 show *serious* body dissatisfaction.

For the calculation of the body mass index (BMI), the ballet dancers underwent an anthropometric evaluation of their height and body mass. The BMI was calculated by means of the ratio between weight (in kilograms) divided by the height (in square meters). The age of the girls was taken into account, and international criteria were adopted in order to rate thinness in reference to the 5th percentile, or less, and overweight/obesity for percentiles higher than 85 (*World Health Organization, 2007*).

The students' anthropometric assessment procedure was carried out in a room inside the dance schools. The heights were measured by means of a stadiometer on a wall without a baseboard. The subject was placed with their back touching the wall, barefoot, heels touching the wall, arms to the sides of the body and the head stabilized, looking ahead. The students' body mass was verified by means of a digital scale with a G-Tech platform, a 150kg capacity and 100g gradations.

For the data analysis, the statistical program SPSS v16.0 was used. Descriptive statistics were performed (mean and standard deviation) to characterize the sample. The Komolgorov-Smirnov normality test was carried out. Basing on the non-parametric characteristic of the data, the Spearman Hank correlation test was used to compare the variables (BMI, BSQ, Body mass and Height).

Results showed averages of 18.44 (± 2.81 kg/m²) for BMI and 69.81 (± 28.15) for the BSQ. As for the classification of these two variables, 3 (9.1%) had low weight, 29 (87.9%) were classified as eutrophic, and only 1 (3%) ballet dancer was considered overweight. As for body dissatisfaction, 23 (69.7%) did not present dissatisfaction with their bodies, 5 (15.2%) were classified as having slight body dissatisfaction and the 5 remaining (15.2%) were considered as moderately dissatisfied with their bodies.

The correlation between the BMI and the BSQ was shown to be significant ($p < 0.05$) presenting $r = 0.48$. These findings corroborate those of the studies of current literature, demonstrating that the higher the BMI, the lower the body dissatisfaction (McCabe, Ricciardelli, & Holt, 2005; Richards, Petersen, Boxer, & Albrecht, 1990).

In an attempt to identify which of the BMI variables might influence the relationship with the BSQ, analyses of the correlation between height and the BSQ and body mass and the BSQ were performed separately; demonstrating $r=0.129$ and $r=0.402$, respectively. Thus, the figures suggest that the body mass variable may influence the relationship between BMI and the BSQ more strongly than the height variable.

The findings of this study corroborate the findings of the literature, demonstrating that body dissatisfaction increases proportionally to the BMI and body mass. However, contrary to expectations, our findings do not point to a great prevalence of body dissatisfaction among people inserted in a context where concern with weight and body shape are common.

The low prevalence of body dissatisfaction found in this study may be related to the fact that the classical ballet dancers involved in the study are not professionals. Therefore, further studies are important in the attempt to broaden the knowledge of the relationship between body image and classical ballet, taking into account other characteristics of the sample, such as: level of commitment and technical level, time of practice and gender.

References

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

Cash, T. F., & Pruzinsky, T. (2002). *Body image: A handbook of theory, research, and clinical practice*. New York: Guilford Press.

Conti, M. A., Cordás, T. A., & Latorre, M. R. D. O. (2009). A study of the validity and reliability of Brazilian version of the Body Shape Questionnaire (BSQ) among adolescents. *Rev Bras Saúde Materna*, 9(3), 331-338.

Cooper, P.J.; Taylor, M.J.; Cooper, Z.; & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. *Int J Eating Disorder*, 6, 485-494.

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.

LePage, M. L.; & Crowther, J. H. (2010). The effects of exercise on body satisfaction and affect. *Body Image*, 7, 124-130.

McCabe, M. P., Ricciardelli, L. A., & Holt, K. (2005). A longitudinal study to explain strategies to change weight and muscles among normal weight and overweight children. *Apetite*, 45, 225-234.

Oliveira, F. P., Bosi, M. L. M., Vigário, P. S., & Vieira, R. S. (2003). Comportamento alimentar e Imagem corporal em atletas. *Revista Brasileira de Medicina do Esporte*, 9(6), 348-356.

Ribeiro, L. G., & Veiga, G. V. (2010). Imagem corporal e comportamentos de risco para transtornos alimentares em bailarinos profissionais. *Rev Bras Med Esporte*, 16(2), 99-102.

Richards, M. H., Petersen, A. C., Boxer, A. M., Albrecht, R. (1990). Relation of weight to body image in pubertal girls and boys from two communities. *Dev Psychol*, 26, 313-321.

Schilder, P. (1999). *A imagem do corpo: as energias construtivas da psique*. (3a ed.). São Paulo: Martins Fontes.

Simas, J. P. N., & Guimarães, A. C. A. (2002). Ballet Clássico e transtornos alimentares. *Rev da Educação Física/UEM Maringá*, 13(2), 119-126.

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

Tavares, M. C. G. C. F. (2003). *Imagem corporal: conceito e desenvolvimento*. Barueri, SP. Manole.

