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ORIGINAL ARTICLE

Body dissatisfaction and bullying among underweight schoolchildren in Brazil and Portugal: a cross-cultural study

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Abstract

Introduction: the body image is constituted by psychic and cultural aspects elaborated by the subject. It results in satisfaction or dissatisfaction, which can be promoted or intensified by peer pressure on ideals of body image.

Objective: to compare the prevalence rates of body dissatisfaction between Brazilians and Portuguese underweight, and to analyze the association of this variable with the social context, nutritional status and participation in bullying situations.

Methods: 720 students from both countries (377 girls; M = 10 years old), from five public schools and three private schools participated in this research. Participants answered the following instruments: Sociodemographic Questionnaire; Body Silhouettes Scale and Bullying Questionnaire. Body mass and height were also measured. The data were analyzed statistically.

Results: in relation to dissatisfaction with thinness, the participants in the private education network presented 0.43 (95% CI = 0.25-0.72) times less likely to manifest this condition when compared to the participants in the public education network. Boys were 1.64 (95% CI = 1.08-2.50) times more likely to present the outcome of dissatisfaction than girls. Among the bully-victim, 3.67 (95% CI = 1.41-9.53) times more chances were observed when compared with those who did not participate in bullying situations. The data revealed that body satisfaction was similar among students from both countries, but differed in some aspects of context. It was found that children and adolescents with low weight also need attention in relation to body dissatisfaction, mainly due to the identification of this variable as a possible risk factor associated with bully-victims.

Conclusion: interventional actions can be subsidized by the results presented to prevent and combat both body dissatisfaction and school bullying.

Keywords: body satisfaction, nutritional status, bullying.

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Authors summary

Why was this study done?
Previous studies have already found relationships between dissatisfaction with body image and bullying situations, especially with regard to victimization in overweight or obese children. However, few studies have carried out comparative analyses between countries, and specifically, regarding the relationship of such variables in underweight children. Thus, this study was designed to add elements that help to understand the phenomenon and variables related to its occurrence, in a comparative way between Brazilian and Portuguese low body weight pupils.

What did the researchers do and find?
In anthropometric terms, Portuguese students exhibited a higher frequency of normal weight compared to Brazilian students. In both groups of students, the majority reported dissatisfaction with their body image. The main cause of dissatisfaction was "overweight", even though the analyses were performed only with "underweight" or "normal weight" participants. This is a relevant point of the study, given the problem of body image distortion. An association was observed between dissatisfaction with body image and the roles of participation in bullying situations, indicating that not only overweight and obese children get involved in this type of violence, but that underweight children are also a risk group for involvement in this type of problem.

What do these findings mean?
The results help to understand the association between bullying and body dissatisfaction, especially among students who have adequate anthropometric conditions, but who report not being satisfied with their body image or among underweight children. Anti-bullying interventions can use these results to include a discussion about socially established standards of beauty that may favor the occurrence of bullying in Brazilian and Portuguese schools.

INTRODUCTION

Body image is a biopsychosocial and multidimensional construct that encompasses perceptions, cognitions, feelings and behaviors in relation to appearance, functions and physical abilities[1]. It is an individual/internalized representation of the body, which contributes to the subjective constitution of each person, while reflecting the structure and real function of the lived body[2]. The experience associated to the body, in this perspective, assumes social and cultural aspects so that the individual can respond to the standards and idealized appearance, or to the sociocultural values imposed to live their body experience[3,4].

In this connection, the judgment that people make in relation to their own body, that is, the perceptual component of body image, is called body satisfaction[1]. When this judgment is negative, the experience of body dissatisfaction is identified. It is known that this body dissatisfaction can contribute to several people's mental health problems, such as low self-esteem and eating disorders[1], anxiety[5] and depression conditions[4]. In addition, the subjective feeling of body satisfaction or dissatisfaction is a strong predictor of better or worse quality of life, respectively[6].

According to the scientific literature, each sociocultural context modulates the individual's levels of satisfaction or body dissatisfaction, especially when considering that contextual variables may be associated with these levels[7]. Thus, each culture may present particular aspects with regard to body image and what can be considered ideal bodies or bodies that diverge from the standard, even if some cultural contexts share some elements such as language and ways of life[8,9]. On the other hand, the expansion of access to information and the increased appreciation of aesthetic standards have transformed body dissatisfaction into a global problem, which can affect individuals of diverse ethnic and cultural origins[10,11]. Hence the importance of research that includes, to some extent, the cultural influences on body image and body satisfaction or dissatisfaction is highlighted[10,11].

There are still few studies that relate body (dis) satisfaction in children and adolescents with bullying. Bullying is a type of violence between peers characterized by repetitive, intentional aggression and based on relationships with a marked imbalance of power between victims and aggressors[12,13]. It is considered a public health problem, and its prevalence rates also vary according to sociocultural realities. In Brazil, victimization rates are approximately 7% and the practice of aggression reaches 21%. In Portugal, a survey carried out with 360 students from public schools revealed an average rate of involvement in bullying situations of 27.5%[14].

Peer pressure, one of the expressions of bullying, can also influence the structuring of students' body image and change behaviors in relation to their bodies, often promoting or intensifying body dissatisfaction[15,16]. At the same time, the self-assessment of the body influences attitudes and behaviors, being fundamental in the development of social skills and interpersonal relationships[17]. This aspect is accentuated at the beginning or in full-fledged adolescence, when a negative criticism regarding the body or body weight made by peers can have distressing effects on body satisfaction[15]. Data also reveal associations between body dissatisfaction and involvement in school bullying situations[18].

In view of this scenario, studies have focused on overweight or obese participants[19,20]. This is understandable, given that several investigations indicate that rates of childhood overweight and obesity have been increasing rapidly in recent years[6], and is already considered a public health problem in both developed and developing countries[21].

Evidence indicates that overweight or obese children and adolescents are more likely to develop body dissatisfaction when compared to eutrophic peers[22]. At the same time, data are also reported that correlate with an increased likelihood of experiencing bullying among obese or overweight children[19,20]. However, it is also known that excessive thinness may be related to greater body dissatisfaction and that it may be associated with experiences of victimization at school[23]. However, few studies have investigated body dissatisfaction in

underweight children and adolescents, and some that propose to do so find it difficult due to the small number of participants recruited with these conditions[24]. This literature gap is also found in studies on bullying with a cross-sectional design[23].

Despite the similarities between countries, in terms of language, for example, it is believed that social and cultural differences can influence the establishment of patterns of body (dis)satisfaction. In addition, currently, the most studied nutritional status is obesity, followed by overweight; however, low weight can also be a relevant factor for children and adolescents' body dissatisfaction, because low weight does not fit the prevailing aesthetic standards. This seems to be an important aspect to be considered when thinking about the relationships between peers, and low weight may also be a risk factor for an involvement in conflict situations in the school setting, such as bullying.

Thus, this study aims to assess the prevalence rate of body dissatisfaction among underweight students from two metropolitan cities in Portugal and Brazil, as well as to review the association of this variable with the social context, nutritional status and participation in bullying situations. Thus, based on the literature, it is hypothesized that there are differences between the prevalence of body dissatisfaction of students between the two countries, such as students with better social status, with low weight and victims of school bullying are more dissatisfied in terms of body image perception.

METHODS

Study type and scenario

Cross-cultural exploratory study and intentional sampling, conducted in the metropolitan city of Braga, located in the Minho Region, in North Portugal, and also in the metropolitan city of Florianópolis, State of Santa Catarina, in the Southern Region of Brazil, during the period between November 2014 and May 2015. The selection of schools in both countries was intentional. In total, four municipal public schools and a private school in Braga, a municipal public school as well as two private schools in Florianópolis were selected.

Participants

All the students from the 3rd to the 6th year of Elementary School, of both genders, enrolled in the selected schools were asked to participate in the study. From the total number of students and the proportionalities between public and private schools in the two cities, the sample size was calculated, assuming an alpha of 0.05, with a power of 80%. According to the sample calculation, the number of participants should total 767 students, of which 374 (299 from public schools and 75 from private schools) in Portugal and 393 (266 from public schools and 126 from private schools) in Brazil. As all the students were asked to participate in the survey, the total number of participants was 774, with 379 (295 from public schools and 84 from private schools) in Portugal and 395 (266 from public schools and 129 from private schools) in Brazil. Of these, 62 participants were overweight or obese and were therefore excluded from the review. An indication of intellectual disability that would prevent understanding of the instruments was also considered an exclusion criterion. However, no applicant was excluded for this reason.

Thus, the final number of participants was 712, with 350 (274 from public schools and 76 from private schools) in Portugal and 362 (243 from public schools and 119 from private schools) in Brazil. In terms of characterization of the participants girls were the majority (n=377), the age was between 7 and 14 years old (M = 10 years old), and the participants were evenly distributed in the different levels of education: 3rd year (25.6%), 4th year (26.3%), 5th year (22.6%) and 6th year (25.6%).

Procedures

Prior to data collection, parents and children and adolescents received detailed information about the research. Participants were informed about the research and expressed their consent to participate in the study through the Term of Assent, which was prepared in clear and accessible language for the age of the participants. In the same way, the Free and Informed Consent Term was sent to the parents and/or guardians requesting their consent in relation to the students' participation.

Then, collectively, the participants answered the self-report instruments on their participation in bullying and on the perceived and desired body image. In the second stage of data collection, the students' body weight and height were measured to calculate the body mass index (BMI). Both stages were applied and supervised by two researchers trained in the instruments applied and who were available to clarify any doubts of the participants. The average time of data collection was 50 minutes in each class. The researchers returned twice more in each class to actively search for students who were absent on the first day of application.

Instruments

Sociodemographic Questionnaire: A standardized instrument was used to collect the following data: sex, age, country of residence, type of school and mother's education.

Bullying Questionnaire: Two questions from an instrument that measures bullying behaviors were used[25]. The first question asked how many times, in the last three months of class, the participant had been a victim of school bullying, while the second question asked how many times the participant had been a bully. With the information obtained from those who answered that they were victims and aggressors three or more times, a group of "victims-aggressors" was created. Thus, participants were classified into four categories of participation in bullying: "does not participate", "victim", "aggressor" and "victim-aggressor". The instrument showed a moderate level of internal consistency in the sample group, with Cronbach's alpha equal to 0.614.

Body Silhouettes Scale[26]: Composed of a set of figures of children numbered from 1 to 9, representing a continuum from thinness (silhouette 1) to severe obesity (silhouette 9). This instrument was validated for the Brazilian context, with good psychometric indices[27]. The figures were presented to the students on a single sheet

and then they answered the following questions: 1. Which silhouette best represents their current physical appearance (real silhouette)? 2. Which silhouette would you like to have (Ideal silhouette)? Satisfaction with body image was identified through the discrepancy between the value corresponding to the real silhouette and the value indicated as the ideal silhouette (real silhouette - ideal silhouette). Thus, students who presented a value equal to zero were classified as "satisfied" with their body image, and those who showed values different from zero were considered "dissatisfied". When this difference was positive, the individual was considered dissatisfied due to excess weight and, when negative, dissatisfied due to thinness. Regarding the internal reliability of the scale in the sample group, there was a moderate level of internal consistency, with Cronbach's alpha equal to 0.643.

Measurement of body weight and height[28]: An anthropometric scale with a graduation of 0.1 kilograms and a stadiometer with a resolution of 0.1 centimeters were used. Nutritional status was assessed using the body mass index (BMI = body mass (kg) / height (m)²). The BMI classification was performed according to the established cut-off points[29], which allowed the participants to be stratified into four categories: underweight, normal, overweight and obese. For calculation purposes, taking into account the purpose of this study, obese and overweight children and adolescents were excluded from the analyses.

Data Analysis

Data were initially analyzed using descriptive statistics (mean, standard deviation and frequency distribution). Data normality was verified using the Kolmogorov-Smirnov test. The comparison of the variables means was verified using the Mann-Whitney U test. The chi-square test was used to verify associations between categorical variables. And the association between dissatisfaction with thinness and excess weight and the other independent variables were analyzed using binary logistic regression. Two models were tested, one simple and the other adjusted for all variables that, in the raw model, presented $p<0.20$[30]. The adherence test explained 62.7% of the Enter model for the adjustment in the dependent variable dissatisfaction with thinness, and 88.5% in dissatisfaction with excess. In all analyses, a significance level of 5% was adopted, using the SPSS statistical package version 20.0.

Ethical Aspects

The research is part of a cross-cultural macro-project approved by the Ethics Committee for Social Sciences and Humanities of the University of Minho (process 010/2014), Portugal and the Ethics Committee for Research with Humans of the University of the State of Santa Catarina (opinion 5439/ 2011), Brazil.

RESULTS

There was a homogeneity of participants in terms of age in both countries (=9.85; SD=1.28, in Portugal; =9.70; SD=1.46, in Brazil). However, Portuguese students had higher body mass (=37.57; SD=7.95), height (=1.41; SD=0.08) and BMI (=18.62; SD=2.65) when compared to Brazilian schoolchildren. There was also a statistically significant association with nutritional status and country of origin ($p<0.001$). Although in both countries most students were classified as 'underweight', the frequency of underweight Brazilian children and adolescents (64.9%) was higher than that of the Portuguese schoolchildren (52.3%), while the Portuguese had a higher frequency of normal weight individuals compared to Brazilians (47.7% and 35.1%, respectively).

Regarding body satisfaction, it was found that most participants were dissatisfied with their body image. The main cause of dissatisfaction reported was "overweight" for 35% of the participants, even though the survey was performed only with "underweight" or "normal weight" participants. However, this variable did not show a significant association with the country of origin. Furthermore, an association was found between the mothers' education and the country of origin, with the highest frequency of lower education being found in the mothers of Brazilian students, since in 33.4% of the cases those mothers attended only Elementary School. Regarding the roles of participation in bullying, there was a significant prevalence of students in Portugal who declared themselves involved in bullying, mainly in the roles of aggressors and victims-aggressors. These data are presented in Table 1.

Table 1: Sociodemographic and anthropometric characteristics, body satisfaction index and participation in bullying among students from Portugal and Brazil

Variables	Total	Portugal	Brazil	p-value*
	(N=712)	(N=350)	(N=362)	
	X' (SD)	*X'*(SD)	*X'*(SD)	
Age (years)	9.77 (1.38)	9.85 (1.28)	9.70 (1.46)	0.078
Body Mass (kg)	36.52 (8.45)	37.57 (7.95)	35.51 (8.80)	<0.001
Height (m)	1.40 (0.09)	1.41 (0.08)	1.39 (0.10)	0.007
BMI (kg/m²)	18.31 (2.67)	18.62 (2.65)	18.01 (2.65)	<0.001

Continuation - Table 1: Sociodemographic and anthropometric characteristics, body satisfaction index and participation in bullying among students from Portugal and Brazil

Variables	Total	Portugal	Brazil	p-value**
	n(%)	n(%)	n(%)	
Nutritional Status				<0.001
Low Weight	418 (58.7)	183 (52.3)	235 (64.9)	
Normal Weight	294 (41.3)	167 (47.7)	127 (35.1)	
Body Satisfaction				0.583
Satisfied with body image	317 (44.6)	152 (43.4)	165 (45.8)	
Dissatisfied because of thinness	144 (20.3)	69 (19.7)	75 (20.8)	
Dissatisfied because of excess weight	249 (35.1)	129 (36.9)	120 (33.3)	
Mother's education				<0.001
Did not know the answer	229 (32.2)	116 (33.1)	113 (31.2)	
Elementary School	196 (27.5)	75 (21.4)	121 (33.4)	
High school	137 (19.2)	94 (26.9)	43 (11.9)	
University education	150 (21.1)	65 (18.6)	85 (23.5)	
Bullying				0.036
Does not participate	534 (75.0)	257 (73.4)	277 (76.5)	
Victim	115 (16.2)	52 (14.9)	63 (17.4)	
Aggressor	31 (4.4)	18 (5.1)	13 (3.6)	
Victim-aggressor	32 (4.5)	23 (6.6)	9 (2.5)	

x'(sd) = mean (standard deviation); n = number of participants; * U of Mann-Whitney; ** Chi square

According to the logistic regression analysis with the outcome variable dissatisfaction with thinness, there was an association of dissatisfaction due to thinness with the school system, gender, roles of participation in bullying and nutritional status. When the analysis was adjusted, it was found that all variables remained associated with the outcome. Participants in the private school system were 0.43 (95%CI=0.25-0.72) times less likely to be dissatisfied with thinness when compared to those in the public school system. Boys were 1.64 (95%CI=1.08-2.50) times more likely to have the same outcome as girls; likewise, victim-aggressors had 3.67 (95%CI =1.41- 9.53) times more chances than those who do not participate in bullying, and participants with low weight were 3.71 (95%CI=2.17-6.35) times more prone than those of normal weight. The results of this analysis are shown in Table 2.

Table 2: Odds ratios using dissatisfaction with thinness as a dependent variable

Variables	OR (IC95%)	p-value	OR** (95%CI)	p-value
Country		0.957		
Portugal	1.01 (0.68-1.50)		-	
Brazil	1		-	
Teaching network		0.004		0.002
Public	1		1	
Private	0.48 (0.29-0.79)		0.43 (0.25-0.72)	
Gender		0.025		0.021
Male	1.57 (1.06-2.35)		1.64 (1.08-2.50)	
Female	1		1	
Age group		0.996		
7-9	0.98 (0.65-1.49)		-	
10-11	1		-	
12-14	0.97 (0.51-1.88)		-	
Mother's education		0.257		
Elementary School	1		-	
High school	1.41 (0.81-2.45)		-	
University education	0.86 (0.47-1.56)		-	

Continuation - Table 2: Odds ratios using dissatisfaction with thinness as a dependent variable

Variables	OR (IC95%)	p-value	OR** (95%CI)	p-value
Bullying		0.037		0.032
Does not participate	1		1	
Victim	1.37 (0.80-2.35)		1.40 (0.79-2.49)	
Aggressor	0.60 (0.20-1.84)		0.63 (0.20-2.02)	
Victim-aggressor	3.21 (1.31-7.85)		3.67 (1.41-9.53)	
Nutritional Status		<0.001		<0.001
Low Weight	3.59 (2.13-6.07)		3.71 (2.17-6.35)	
Normal Weight	1		1	

OR = Odds ratio; 95%CI = 95% confidence interval; ** OR adjusted for the variables that presented p< 0.20 in the raw model.

DISCUSSION

This study aimed to compare the prevalence of body dissatisfaction among underweight students from two metropolitan cities in Portugal and Brazil, as well as to verify the association of this variable with the social context, nutritional status and participation in bullying. Among the main results, it was found that, although students from both countries differed in terms of anthropometric aspects, body dissatisfaction occurred in an equivalent way in both countries. In addition, the factors associated with dissatisfaction with thinness were: school system, gender, nutritional status and roles in bullying participation, while only nutritional status was associated with dissatisfaction due to excess weight. It was also found that Portuguese participants had higher averages in all aspects when compared to Brazilians.

Some cross-cultural studies have compared anthropometric variables of children and adolescents from different countries and ethnicities, and in these studies, it was possible to identify differences in terms of body mass, height and BMI[24,31]. An investigation carried out with girls in a similar age group to the present study ($\bar{x}$ = 9.11), who lived in England, found differences between ethnicities, as Caucasian girls had higher body mass and BMI compared to Asian girls[31]. In two other studies involving adolescents with mean age of approximately 13.0 years, it was found that in the first study, Japanese adolescents had higher body mass, height and BMI when compared to the Vietnamese in both genders[32]. Regarding the second investigation, Swedish girls had higher body mass and height than Argentinian girls, and Swedish boys only had higher height compared to Argentinian boys[8]. Another study showed that Australian adolescents had a higher BMI when compared to Malaysian and Chinese adolescents[7].

These differences are also found when considering the nutritional status of children and adolescents from different parts of the world. In this study, Brazilian children and adolescents had a higher rate of underweight individuals when compared to Portuguese children. Similarly, in the Hill and Bhatti[31] study Asian girls were underweight for their age, while Caucasian girls were 9.0% taller than expected. These results indicate that, even when children present similar physical development according to age group, each ethnic group has typical characteristics in relation to anthropometric variables.

Although physical differences and different socioeconomic levels, based on the mothers' education, existed among the participants in this study, it was found that there was no statistically significant association between body satisfaction and country of origin. This indicates that this variable was evenly distributed both in Portugal (43.4%) and in Brazil (46.1%). However, the existence of cross-cultural differences regarding body dissatisfaction is still a controversial topic in the literature. Similarly, in a study carried out among adolescents in Sweden and Argentina, also countries in Europe and Latin America respectively, no statistically significant difference was found in relation to body dissatisfaction according to the country of origin[8]. In another study carried out with British girls, but of different ethnicities, it was found that Caucasians and Asians had similar levels of body dissatisfaction, regardless of their ethnic differences[31].

On the other hand, some studies have reported differences in the perception of body image between children and adolescents from different countries. It has already been verified, for example, that Korean adolescents of both genders indicated greater body dissatisfaction when they were compared to Americans[33]. In another study carried out in the United States with children of different ethnicities, it was also found that Asian children were more dissatisfied with their bodies than African-Americans, Caucasians or Hispanics[24]. Malaysian and Chinese adolescents also had significantly higher levels of body dissatisfaction when they were compared to Australian adolescents[7].

Although part of these differences between the levels of body dissatisfaction in different countries and different ethnicities may be due to differences in the methodologies adopted in each study, the explanation that has been considered more consistently in the literature is the sociocultural theory of body image. This theory suggests that sociocultural factors can directly affect satisfaction with the body, meaning that even in apparently similar cultural contexts there may be differences in the levels of body dissatisfaction between individuals[7,9].

Thus, the results presented in this study, together with other results found in the literature, indicate that children and adolescents from Western countries tend to have similar levels of body dissatisfaction, while Asians tend to have different levels of dissatisfaction[31]. However,

evidence has shown that current beauty standards have become increasingly internationalized, being no longer just a phenomenon of the Western culture and being sought after by most young people around the world[15]. This makes the global scenario even more critical, given that the typical characteristics of each ethnicity often do not correspond to the standards set out by the culture, which makes body dissatisfaction a highly prevalent phenomenon in almost all countries[34].

Regarding the prevalence of body satisfaction and dissatisfaction, it was observed that only 44.8% of the participants declared themselves satisfied with their body image (43.4% in Portugal and 46.1% in Brazil), while 55.2% were dissatisfied either with thinness or excess weight. Since the assessments were performed only with underweight or normal weight participants, a high percentage of children and adolescents dissatisfied with thinness was expected. However, 35.0% of the participants stated they were dissatisfied with being "overweight", which suggests that these students tend to overestimate their body measurements. These results were similar to another study carried out with Chinese children, in which only 46.5% of boys and 43.0% of girls who had a healthy weight were satisfied with their body image[35]. The same situation can also be observed in studies performed in Latin America[36] and specifically in Brazil[3].

The results of this study also indicated an association between roles in participation in school bullying and country of origin. Portuguese students declared more involvement in the phenomenon than Brazilian students. There were also different distributions of roles in both countries. To explain such diversities found in cross-cultural studies, some scholars point to cultural characteristics, school differences[37] and social inequality[37] as possible factors that can influence phenomena such as bullying.

Regarding the relationship between school bullying and body dissatisfaction, some studies have pointed out the importance of peer relationships in the construction of body image[15,16,18,38]. In the present investigation, an association was found between the role of victim-aggressor and greater dissatisfaction with thinness. This result points to a path that deserves more attention from researchers in this area, considering that this group that get involved in school bullying is the one with the greatest risk factors associated with the healthy development of children and adolescents[39]. Furthermore, this variable was similar to nutritional status for understanding dissatisfaction with thinness in this specific group of underweight participants. Thus, more studies are needed to understand the reasons that make this group perceive themselves with this twisted body image. Victim-aggressors are individuals characterized to assume both roles, sometimes as a victim, sometimes as an aggressor, and often, the desire for a larger size body can be a reflection of the aggression suffered, which causes the desire to be able to practice self-defense or to retaliate for the violence suffered, or even to reproduce with others the aggression experienced, thus perpetuating the cycle of violence and propagating bullying.

Regarding the nutritional status variable, this indicator proved to be the main factor associated with body dissatisfaction, both due to thinness and to excess weight. Several studies have already pointed out that an increased BMI, which suggests overweight or obesity, is responsible for greater body dissatisfaction in children and adolescents, especially when they compare to normal-weight peers[6,16,24,40]. However, some researchers who also analyzed children with low weight found divergent results from those found in this study. Among these, studies in which overweight or obese children or adolescents were found to be more likely to have body dissatisfaction when compared to low weight children[1,15], or low weight children were less likely to be dissatisfied[22]; or low weight was not associated with body dissatisfaction[3].

However, it should be emphasized that these results must be interpreted considering the three main limitations of this study. Firstly, because it is a research that involved a non-probabilistic sample, its results cannot be generalized to include other contexts. Secondly, the instrument used to assess body image is not capable of objectively measuring satisfaction with muscularity, causing figures with larger bodies to generate controversial interpretations among the participants. And the third limitation refers to the self-report instrument used to identify students' participation in bullying situations, as this type of enquiry can induce the inception of socially accepted responses.

Thus, other studies should consider these limitations to further clarify the understanding of the phenomenon of body dissatisfaction in underweight children and adolescents and its association with variables such as bullying or type of school. Further studies are needed to include underweight participants in research related to body image so that it is possible to better understand the relationships found in the present study. In any case, this study strongly suggests the need to implement interventional actions with children and adolescents, aiming to prevent and curb both early body dissatisfaction and school bullying.

FINAL CONSIDERATIONS

Based on the cross-cultural proposal of comparing data collected from students in Brazil and Portugal, we concluded that, despite social and cultural differences, the prevalence of body dissatisfaction was equivalent across countries. In addition, students from the private school system were less likely to be dissatisfied with thinness; however, boys, victim-aggressors and underweight participants were more likely to be dissatisfied with thinness. It is also noteworthy that, even though the assessment was performed only among children and adolescents with normal weight and low weight, children with normal weight still reported dissatisfaction with their body image attributed to the perception of excess weight.

With the data obtained, it was also possible to verify that most of the participants were dissatisfied with their body image. This occurred in both countries, regardless of the age group of the participants, indicating that there may be possible aesthetic standards, which are often unattainable, even among children and adolescents from different contexts and cultures. This situation is even of more concern when these findings occur in participants of normal weight, which demonstrates a great distortion of their body image. In addition, this study goes

further in the sense of elucidating the problem involving underweight children and adolescents, who also showed great body dissatisfaction, and may even contribute to their involvement in situations of violence at school, such as bullying. This aspect deserves even more attention when the youngsters assume the role of victim-aggressors, a group in which the greatest associated risk factors are found. Thus, further studies should be considered in order to help underweight children and adolescents to face these difficulties experienced in the school setting.

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Resumo

Introdução: a imagem corporal é constituída por aspectos psíquicos e culturais elaborados pelo sujeito. Dela decorre satisfação ou insatisfação, que podem ser promovidas ou intensificadas pela pressão dos pares sobre os ideais de imagem corporal.

Objetivo: comparar a taxa de prevalência de insatisfação corporal entre estudantes brasileiros e portugueses com baixo peso, e analisar a associação desta variável com o contexto social, estado nutricional e participação em situações de bullying.

Método: participaram da pesquisa 720 estudantes dos dois países (377 meninas; M = 10 anos), de cinco escolas públicas e três escolas privadas. Os participantes responderam os seguintes instrumentos: questionário sociodemográfico; Escala de Silhuetas Corporais e Questionário de Bullying. Também foram mensuradas massa corporal e estatura. Os dados foram analisados estatisticamente.

Resultados: em relação à insatisfação pela magreza os participantes da rede de ensino privada apresentaram 0,43 (IC95%=0,25-0,72) vezes menos chances de manifestarem esse quadro quando comparados aos participantes da rede pública. Os meninos apresentaram 1,64 (IC95%=1,08-2,50) vezes mais chances de apresentar o desfecho de insatisfação que as meninas. Entre as vítimas-agressoras observou-se 3,67 (IC95%=1,41-9,53) vezes mais chances quando comparadas com aqueles que não participavam de situações de bullying. Os dados revelaram que a satisfação corporal foi semelhante entre os estudantes dos dois países, mas diferiu em alguns aspectos de contexto. Verificou-se que crianças e adolescentes com baixo peso também necessitam de atenção em relação à insatisfação corporal, principalmente em função da identificação dessa variável como um possível fator de risco associado a vítimas-agressoras de bullying.

Conclusão: ações interventivas podem ser subsidiadas pelos resultados apresentados para prevenir e combater tanto da insatisfação corporal quanto o bullying escolar.

Palavras-chave: satisfação corporal, estado nutricional, bullying.