



Body Image and Anthropometric Data in Adolescents

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Introduction

Body Image reflects a person path, whose perceptions are part of its unit and are determinant for its existence, at each moment. For each individual, the perception about his body is affected by several factors, that most of the time leads to dissatisfaction with own's body image, (1) (2) specifically in adolescents.

At the present moment, studies that correlate real measured anthropometric data, body image perception and satisfaction are not known in Portuguese adolescents.

Aim

To evaluate the relation between real anthropometric data and body image perception and satisfaction, in Portuguese adolescents.

Results

Sample: 124 (58%) females and 90 (42%) males

		BMI	Satisfaction	Perception
Spearman's rho	BMI	1,000	,457**	,424**
			,000	,000
		214	214	214
Satisfaction	Correlation Coefficient	,457**	1,000	,187**
		,000		,006
	N	214	214	214
Perception	Correlation Coefficient	,424**	,187**	1,000
		,000	,006	
	N	214	214	214

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1
Body Mass Index (BMI), satisfaction and perception Spearman's Correlation

• The nonparametric test *Mann-Whitney-Wilcoxon* ($p=0,000$) revealed that there is a statistically significant difference between body image perception and satisfaction in the different genders.

• *Kruskal-Wallis test* ($p=0,000$) revealed that there is a statistically significant difference in body image perception in different education degrees.

• It was also found through a significant correlation between:

- Body image satisfaction and perception (Spearman $Rho=0,187$; $p=0,006$)
- Body image satisfaction and BMI (Spearman $Rho=0,457$; $p<0,000$)
- Body image perception and BMI (Spearman $Rho=0,424$; $p<0,000$).

Methods

• A descriptive transversal and quantitative study was designed in an education institution located in the North of Portugal.

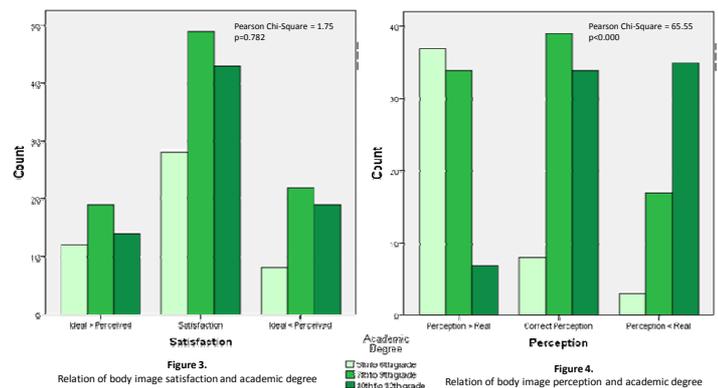
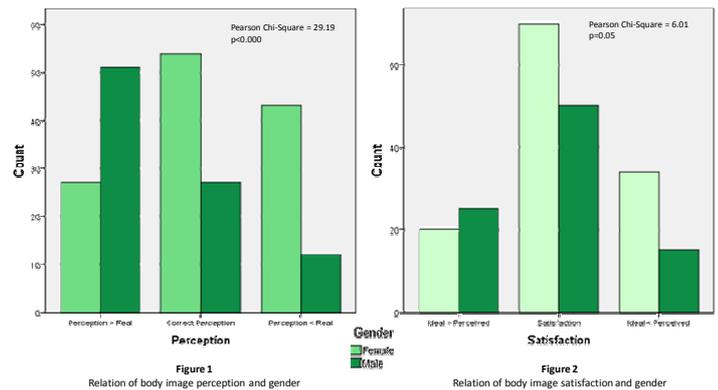
• There were evaluated 214 adolescents, between 10 and 18 years.

• Data was collected using body weight (SECA 869), stadiometer (SECA), measuring tape and skinfold calipers (HARPENDEN).

• Each participants anthropometric data (weight and height) were assessed, aiming to determine BMI for age percentile. (3)

• Body Image perception and satisfaction was determined using Gardner et al, body image scales, with +/- 30% distortion.(4)

• Data were analyzed using the statistical programme *SPSS (Statistical Package for Social Sciences)* version 19.0.



Conclusions

• Although several studies, in other countries and/or age groups, show that females have lower body image satisfaction levels than males, this study failed to show coincident results. (5)

• It was proved that as academic degree increases, adolescents body image perception increases as well. It is evident that intervention projects to promote better body images perception and satisfaction are fundamental, especially in adolescents from younger age groups, as previous studies recommended. (6)

Bibliographic References

1. Alves, D, et al. Cultura e Imagem Corporal. *Fundação técnica e Científica do desporto*. 2009, Vol. 5, pp. 1-20.
2. Pallan, M J, et al. Body Image, body dissatisfaction and weight status in south asian children: a cross-sectional study. *BMC Public Health*. 2011, Vol. 21, pp. 1-8.
3. Kuczmarski RJ, Ogden CL, Guo SS, et al. 2000 CDC Growth Charts for the United States: Methods and Development. *Vital and Health Statistics*. May 2002, Vol. 11(246).
4. Gardner, Rick M. et al. Development and validation of two new scales for assessment of body image. *Perceptual and Motor Skills*. 1999, Vol. 89, pp. 981-983.
5. Aegisdottir, Bryndis B., Ingólfssdóttir, Gudrun e Sigúsdóttir, Inga D. Body Image trends among Icelandic adolescents: A cross-sectional national study from 1997 to 2010. *Body Image*. 2012, Vol. 9, pp. 404-408.
6. Arciszewski, Thomas et al. Threat of the thin-ideal body image and body malleability beliefs: Effects on body image self-discrepancies and behavioral intentions. *Body Image*. 2012, Vol. 9, pp. 334-341.