

IJUP'11

meeting
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Program

Thursday, February 17th

09:00-09:30	Registration	
9:30-11:00	Parallel Oral Sessions I	
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	A2 - Biological, Environmental & Health Sciences II	p. 15
	A3 - Literature & Language Sciences	p. 23
	A4 - Engineering I	p. 31
	A6 - Communication Sciences I	p. 39
11:00-11:30	Welcome Session - A1	
11:30-12:30	Poster Session & Coffee Break	
12:30-14:00	Lunch Break	
14:00-15:30	Parallel Oral Sessions II	
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	A2 - Biological, Environmental & Health Sciences IV	p. 55
	A3 - Psychology & Education Sciences I	p. 63
	A4 - Engineering II	p. 71
	A5 - Applied Physics	p. 79
15:30-17:00	Poster Session & Coffee Break	
17:00-18:30	Parallel Oral Sessions III	
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10:30-11:00	Poster Session & Coffee Break	
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	A5 - Sport Sciences I	p. 201
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12:30-14:00	Lunch Break	
14:00-15:30	A1 - Workshop "The Researcher's Checklist"	
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Protective Effect of Physical Activity on Dissatisfaction with Body Image in Children - A Cross-sectional Study

M. Gaspar¹, T. Amaral¹, B. Oliveira¹, and N. Borges¹

¹ Faculdade de Ciências da Nutrição e Alimentação, Universidade do Porto, Portugal.

An accurate body image perception is crucial for the way children and adolescents develop a healthy relationship with their bodies and food intake behavior [1]. Some evidence also exist showing that regular physical activity and sport have a beneficial effect on the way children and adolescents perceive their body image [2, 3]. Nevertheless, the association between physical activity and body image dissatisfaction has not been yet properly quantified. The aim of the present work was to evaluate the frequency of dissatisfaction with body image among secondary school students and to examine the association between the physical activity and Body Mass Index (BMI) with image dissatisfaction.

This is a cross-sectional study conducted in a Porto high school, in which 234 children of both sexes, aged between 10 and 17 years were evaluated. Dissatisfaction with body image was assessed by Collins' Child Figure Drawings for pre-adolescents and adolescents [4]. The degree of dissatisfaction with body image (FID) was calculated as discrepancy between the "ideal figure" and the "perceived figure". The *Baecke* questionnaire was applied to determine the Habitual Physical Activity Index (HPAI) of each participant [5].

Girls were more dissatisfied than boys with their body image (68.1% vs. 52.9%). A high proportion of students of both genders and age groups presented a distorted body image stating that their "perceived figure" was bigger than the "ideal figure". A moderate correlation was found between the FID and BMI percentile in both genders (boys: $r = .698$, $p < .001$, girls: $r = .582$, $p < .001$). High levels of physical activity were associated with a protective effect on dissatisfaction with body image, $OR = .38$, 95% CI [.16, .87] for 3rd vs 1st quartile of HPAI; $OR = .29$, 95% CI [.12, .86], for 4th vs 1st quartile of HPAI, both adjusted for BMI and gender.

In conclusion, body image dissatisfaction increases directly with BMI percentiles in both genders and physical activity has a protective effect on distortion of body image.

References:

- [1] Strauss, R.S. (1999). *Self-reported weight status and dieting in a cross-sectional sample of young adolescents: National Health and Nutrition Examination Survey III*, Archives of Pediatrics and Adolescent Medicine, 153(7), 741-7.
- [2] Kircaldy, B.D., Shephard, R.J., & Siefen, R.G. (2002). *The relationship between physical activity and self-image and problem behavior among adolescents*, Social Psychiatry and Psychiatric Epidemiology, 37(11), 544-50.
- [3] Moreno, J.A., Cervelló, E. and Moreno, R. (2008). *Importancia de la práctica físico-deportiva y del género en el autoconcepto físico de los 9 a los 23 años*, International Journal of Clinical and Health Psychology, 8(1), 171-183.
- [4] Collins, M.E. (1991). *Body figure perceptions and preferences among preadolescent children*, The International Journal of Eating Disorders, 10(2), 199-208.
- [5] Baecke, J.A.H., Burema, J., and Frijters, J.E.R. (1982). *A short questionnaire for the measurement of habitual physical activity in epidemiological studies*, The American Journal of Clinical Nutrition, 36(5), 936-942.