

Poster presentation

Association of body weight and gender with self-esteem in schoolchildren. Survey of Ioannina, Epirus, Greece. The Children study

Peter Angelopoulos*¹, George Tsitsas², Haralambos Milionis¹, Evangelia Grammatikaki², Chrisanthy Vlachaki², Zoi Bouloubasi² and Yannis Manios²Address: ¹Department Pathology, Medicine School, University of Ioannina Greece and ²Harokopio University, Athens, Greece

* Corresponding author

from International Society on Brain and Behaviour: 3rd International Congress on Brain and Behaviour Thessaloniki, Greece. 28 November – 2 December 2007

Published: 17 April 2008

Annals of General Psychiatry 2008, **7**(Suppl 1):S116 doi:10.1186/1744-859X-7-S1-S116This abstract is available from: <http://www.annals-general-psychiatry.com/content/7/S1/S116>

© 2008 Angelopoulos et al.; licensee BioMed Central Ltd.

Background

There is variation in the psychological distress associated with child body weight. Low self-esteem, when observed, provides very little information about the nature of the distress and no indication of the proportion of children with high body weight affected [1-4]. There is a difference in self-esteem among boys and girls. This study used a domain approach to self-competence to evaluate self-esteem in a sample of children from the prefecture of Ioannina, Greece [8-15]. The aim of the study was to determine the associations between body weight, gender and self-esteem in Greek primary schoolchildren

Materials and methods

A cross-sectional study in 13 rural and 15 urban population of the prefecture Ioannina, Epirus, Greece was conducted. A total of 724 primary schoolchildren (mean age: 10.2 years) participated in the study (322 boys and 402 girls), recruited from 28 schools. Participants completed the Self-Perception Profile for Children (Harter's SPCC) and anthropometric measurements (weight, height and Body Mass Index (BMI) were obtained from all children (5-7).

Results

Children with higher body weight had significantly lower self-esteem in athletic competence (Pearson's correlation

coefficient, $r = -0.37$, $p < 0.01$), physical appearance ($r = -0.3$, $p < 0.01$), social acceptance ($r = -0.29$, $p < 0.01$) and global self-worth ($r = -0.37$, $p < 0.01$) compared with normal weight children. Girls scored lower in scholastic competence (Pearson's correlation coefficient, $r = -0.09$, $p < 0.05$), social acceptance ($r = -0.13$, $p < 0.001$) and global self-worth ($r = -0.14$, $p < 0.001$) compared with boys. Children with low global self-worth have 29% more probability to be girl. (odds ratio=0.71, $p < 0.01$, CI: 0.55-0.91).

Conclusions

High body weight impacts the self-perception of children entering adolescence, especially in girls, but in selected areas of competence. Children with high body weight are at particular risk of low global self-worth, scholastic competence and social acceptance. Quantifying risk of psychological distress should help in arguing for more resources in maintaining a normal body weight in children.

References

1. Dietz WH: **Health consequences of obesity in youth: childhood predictors of adult disease.** *Pediatrics* 1998, **101**:518-525.
2. Erikson S, Robinson T, Haydel F, Killen J: **Are overweight children unhappy?** *Arch Ped Adolesc Med* 2003, **157**:746-752.
3. Faith MS, Manibay E, Kavitz M, Griffith J, Allison DB: **Relative body weight and self-esteem among African Americans in four nationally representative samples.** *Obes Res* 1998, **6**:430-437.
4. French SA, Story M, Perry CL: **Self-esteem and obesity in children and adolescents: a literature review.** *Obes Res* 1995, **3**:479-490.

5. Harter S: **The perceived competence scale for children.** *Child Dev* 1982, **53**:87-97.
6. Harter S: **Manual for Self-Perception Profile for Children.** Denver, CO: University of Denver; 1985.
7. Harter S, Stocker C, Robinson N: **The perceived directionality of the link between approval and self-worth: the liabilities of a looking glass self orientation among adolescents.** *J Adolesc* 1996, **6**:285-308.
8. Strauss R, Pollack HA: **Social marginalization of overweight children.** *Arch Ped Adolesc Med* 2000, **154**:931-935.
9. Eisenberg M, Neumark-Sztainer D, Story M: **Associations of weight-based teasing and emotional well-being among adolescents.** *Arch Ped Adolesc Med* 2003, **157**:733-738.
10. Saelens B, Sallis J, Wilfley D, Patrick K, Cella J, Buchta R: **Behavioral Weight Control for Overweight Adolescents Initiated in Primary Care.** *Obesity Research* 2002, **10**:22-32.
11. Sinha R, Fisch G, Teague B, et al.: **Self-esteem and obesity in children and adolescents—A literature-review.** *Obesity Research* 1995, **3**:479-490. Prevalence of French, S. Story, M. & Perry, C.
12. Story M, French SA, Resnick MD, Blum RW: **Ethnic/racial and socio-economic differences in dieting behaviors and body image perceptions in adolescents.** *Int J Eat Disord* 1995, **18**:173-179.
13. Strauss RS: **Dieting and self-reported weight status among young adolescents.** *Arch Child Adolesc Med* 1999, **153**:741-747.
14. Strauss RS: **Childhood obesity and self-esteem.** *Pediatrics* 2000:105.
15. Kaplan KM, Wadden TA: **Childhood obesity and self-esteem.** *J Pediatr* 1986, **109**:367-370.

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:
http://www.biomedcentral.com/info/publishing_adv.asp

