

Poster presentation

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

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### 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.

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