

PHYSICAL ACTIVITY ASSESSMENT USING A MODIFIED PAQ-C QUESTIONNAIRE

Kolimechkov Stefan, Petrov Lubomir & Alexandrova Albena

Department of Physiology and Biochemistry, National Sports Academy 'Vassil Levski',
Sofia, Bulgaria

Corresponding address of the first author: kolimechkov@gmail.com

Keywords: children, obese, overweight, waist-to-height ratio

Introduction: Physical activity plays an important role in a child's development and is a powerful indicator of their health and well-being, and its assessment is an essential part of monitoring and surveillance in schools. The aim of this study was to measure and assess general levels of physical activity amongst Bulgarian and English children by applying a self-reported questionnaire.

Methodology: In total, 94 participants (30 girls and 31 boys from Bulgaria, and 15 girls and 18 boys from England) between the ages of 7 and 10 took part in this study. They were divided into four groups, depending on their nationality and gender. Weight, height and waist circumference were measured, and BMI and Waist-to-Height ratio were calculated. The Z-scores and percentile scores for weight, height and BMI were calculated and assessed using WHO software. Physical activity was measured by a PAQ-C questionnaire, which was adapted and modified for the purposes of this study, and one-way ANOVA was applied to analyse all of the data.

Results: Age, BMI Z-score and BMI percentile score differ significantly ($p < 0.05$). Moreover, the final scores of the PAQ-C showed significant differences between English children (3.17 ± 0.67 for girls and 3.41 ± 0.62 for boys) and Bulgarian children (2.66 ± 0.26 and 2.89 ± 0.28), ($p < 0.001$). There was no difference between overweight and obese ($n=38$) and healthy children in terms of the PAQ-C score.

Conclusions: Further research needs to be carried out on the Bulgarian population in order to obtain national physical activity standards for children and adolescents.