Abstract

The purpose of this study was to describe anthropometric and physical fitness characteristics of low-income Chilean preschool children and to examine whether weight status influences children’s performance on fitness tests. A total of 434 preschool children (246 boys; 5.48 ± 0.31 years) participated in our study. Anthropometry (weight, height, body mass index -BMI- and waist circumference) and fitness tests (handgrip strength test, standing long jump and 20 m sprint) were assessed by trained nutritionists and physical education teachers, respectively. Significant differences in anthropometry and fitness tests between boys and girls were found. The prevalence of overweight was higher in girls; in contrast to that of obesity. Compared to normal-weight children, overweight/obese boys and girls were heavier and had greater waist circumference (P < 0.001), were taller (P 0.002), and showed higher performance in handgrip strength (P 0.027) but not in standing long jump nor 20 m sprint (P 0.052). Screening physical fitness levels in overweight/obese preschool children could be an important tool in order to design an efficacy physical activity programme.

Keywords

BMI, Overweight, Muscular strength, Speed, Preschoolers.