

EFFECT OF OBESITY ON PHYSICAL SELF-CONCEPT OF URBAN SCHOOL CHILDREN LIVING IN POTCHEFSTROOM, SOUTH AFRICA

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ABSTRACT

The purpose of this study was to determine the effect of obesity on the physical self-concept of urban school children living in Potchefstroom, South Africa. A total of 277 (127 boys and 150 girls) children aged 11-13 years from urban schools in Potchefstroom voluntarily participated in cross-sectional, observational research study conducted in 2007. Stature and body mass were measured according to the International Society for Advancement of Kinanthropometry (ISAK). The children were classified into three groups of normal, overweight and obese according to BMI cut-off point suggested by Cole, Bellizzi, Flegal and Dietz (2000). Susan Harter's Self-Perception Profile for Adolescents was used to assess the self-perception of children. Descriptive statistics of means and standard deviations as well as frequencies were calculated for the data. Nonparametric t-test was employed to test significant differences between boys and girls among the three groups. Analysis of variance (ANOVA) and Tukey post-hoc test were calculated to examine the effect of obesity on the children's physical self-concept. The results showed that overweight and obese children were taller and heavier than their normal counterparts. Furthermore, the results showed that the overweight or obesity status significantly affected boys physical acceptance ($F_{7,02} = 2.62, p < 0.05$) as compared to the normal ones. In addition, the overweight or obesity status significantly affected girls scholastic competency ($F_{3,93} = 0.35, p < 0.05$), athletic competence ($F_{4,58} = 0.30, p < 0.05$) and behavioral acceptance ($F_{5,84} = 0.31, p < 0.05$) than the normal ones. It is concluded that overweight and obesity status affects the physical self-concept of social acceptance, scholastic competence and behavioural acceptance of the children. The effect of overweight and obesity on the physical self-perception of school children should be considered in planning obesity management strategies for preventive health care.

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Key words: Obesity, overweight, physical self-concept, self-perception, urban school children, Potchefstroom.

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INTRODUCTION

The increasing prevalence of obesity in both children and adults is an important public health concern worldwide (World Health Organisation, 1988; Moore, Nguyen, Rothman, Couples & Ellison, 1995). Numerous research findings have indicated that obesity is associated with excess fat which adds to the burden of weight-bearing on aerobic exercise (Rowland, 1991; Sung, Yu, So, Lam & Hau, 2005). Urbanization with its high prevalence of sedentary lifestyle habits and the lack of parental support concerning sport activities may further discourage obese children from exer-