



Physical activity in rural African school-aged children and adolescents



António Prista¹; Vítor Lopes², José Maia³, André Seabra³, João Vinagre³, Leonardo Nhantumbo¹, Silvio Saranga¹, Carole Conn⁴, Gaston Beunen⁵

¹Faculty of PE & Sports, UP, Mozambique. ²Sports Science Department, Polytechnic Institute of Bragança, Portugal, ³CIFI2D, Faculty of Sport, University of Porto, Portugal, ⁴Nutrition/Dietetics Program, University of New Mexico, Albuquerque, New Mexico, USA, ⁵Faculty of Kinesiology and Rehabilitation Sciences, KU Leuven, Belgium

Introduction

In industrialized countries, reduced levels of physical activity (PA) associated with increased prevalence of the so-called “hypokinetic diseases” stimulates the interest in research in PA and its correlates. The results are quite consistent across studies, but observations have been conducted mainly in the developed countries, assuming that the lack of mechanization of the poor areas of the world is not associated with sedentary behavior. However, transition societies have been showing a growing urbanization that deserves special attention. Studies from developing countries indicates a trend toward sedentary lifestyles and its co-morbidities on urban areas. Little is known about PA in African rural areas, particularly in school-aged children.

OBJECTIVES

To describe PA habits in children and adolescents from an African rural area.

Methods

AREA

Study was done in Calanga, a rural area from Mozambique not served by electricity, water, sanitation and roads. There is no medical assistance and during the rainy season Calanga remains isolated. Main occupation of the inhabitants of Calanga is subsistence-level farming and raising cattle.

SAMPLE

256 subjects

Males = 117; Females = 139

Age = 6 to 16

Three age groups were created

Group-1 aged 6 to 8, n = 61 (29 boys and 32 girls);

Group-2 aged 9 to 11, n = 79 (42 boys and 37 girls)

Group-3 aged 12 to 16, n = 116 (68 boys and 48 girls).

PA ASSESSMENT

PA was assessed during 24 hours with the MTI actigraph model 7164. A reliable and valid questionnaire was also applied (Prista et al, 2000).

Data from an European sample was used for cross-cultural comparisons (Lopes et al., 2006).

Results

- No sex differences were found for average minutes of daily Moderate, Vigorous and Very vigorous PA.
- With increasing age a trend was evident for PA reduction.
- Activities such as household chores and walking were the main occupations.
- Main cross-cultural differences were:
 - (1) Mozambicans had more total activity;
 - (2) PA did not differ between Mozambican boys and girls ;
 - (3) PA decline with age is more attenuated in the Mozambican sample;
 - (4) Mozambicans showed less bouts of PA at each category

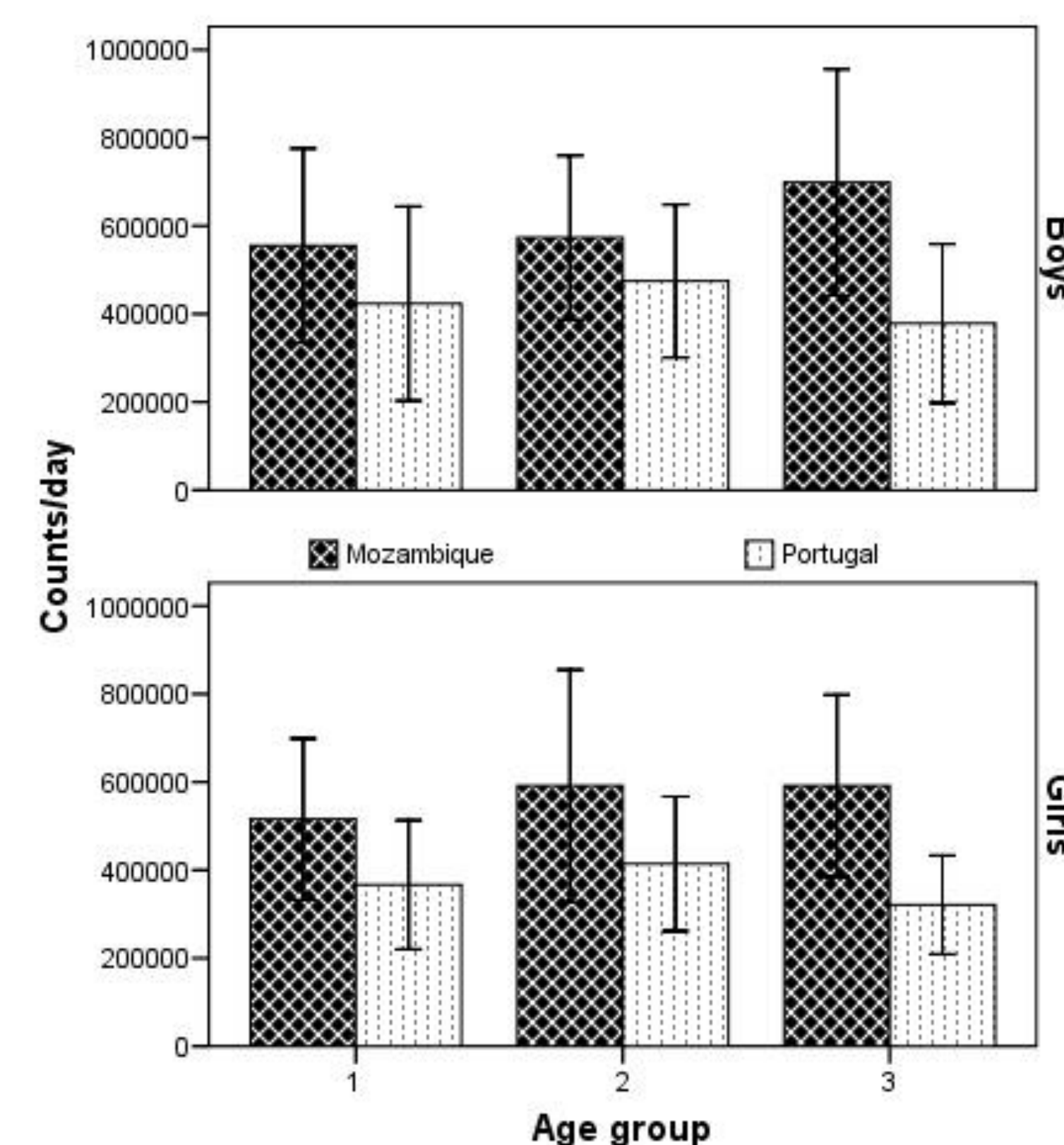


Figure 1: M±SD of the total activity counts for Mozambique and European by gender and age group

Conclusions

Patterns and intensity of PA in children and youth of an African rural area were mainly affected by environment factors linked to physical and geographical constraints that need further study.

Bibliography

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