

Health-related fitness of South African primary school children

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INTRODUCTION

In primary school key health notions are established such as physical fitness and other health-related concepts. Health-related fitness (HRF) carries many benefits¹. In this study the aim was to investigate health-related fitness levels of children from rural and urban primary school backgrounds in South Africa and to contribute these results to pre-existing standards.

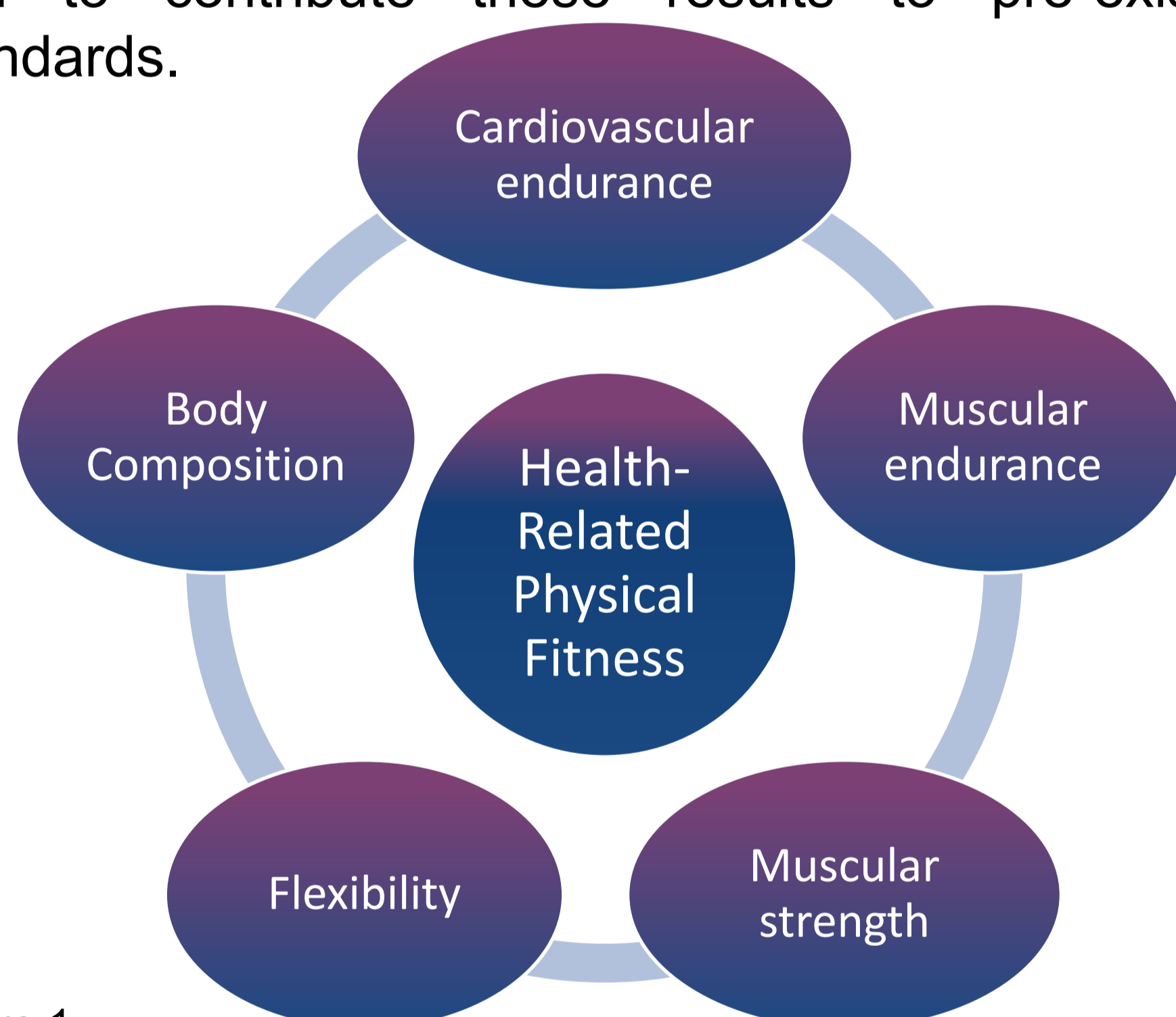


Figure 1: Components of Health-Related Physical Fitness

METHODS



309 male and female participants aged 10-12 (urban and rural primary schools)



Informed consent and questionnaire



Health-related fitness and Anthropometric (weight, BMI and skinfold) tests conducted



Results were tabulated



Data analysis

RESULTS

In the urban school children it was found that they had significantly greater scores in the anthropometric tests than their rural counterparts. No significant differences were seen in the physical fitness nor the maturity offset between the rural and urban primary school children.

Table 1: Anthropometric variables between rural and urban primary school children.

	Rural (n=144)	Urban (n=165)	
	Mean ± SD		P-value (p=0.05)
Height (m)	1.43 ± 0.08	1.47 ± 0.08	2.52698 x 10 ⁻⁶
Weight (kg)	36.35 ± 9.23	41.58 ± 10.01	3.19216 x 10 ⁻⁶
Body fat %	19.70 ± 7.09	24.15 ± 8.69	1.62036 x 10 ⁻⁶
BMI	17.72 ± 3.39	19.11 ± 3.43	0.000437385

DISCUSSION & CONCLUSION

The discoveries of the anthropometric tests and physical fitness tests contribute towards creating a database relating to health-related fitness levels of primary school children in South Africa, which can be compared to pre-existing European or American standards.

REFERENCE

- Grobbelaar CW, Du Toit PJ, Pepper MS, Grant TC, Janse van Rensburg DC, Fletcher F, et al. The correlation between the health-related fitness of healthy participants measured at home as opposed to fitness measured by sport scientists in a laboratory : Research. South African Family Practice. 2014; 56(4):235-9.

