CORRELATION BETWEEN GROWTH AND PHYSICAL FITNESS OF SOCIALLY DISADVANTAGED GIRLS

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ABSTRACT
The intention of this study was to investigate the relationship between growth and physical fitness of girls between the ages seven and 18. The girls (N=302) were randomly selected from six randomly selected schools in an informal settlement in the Western Cape. Twenty anthropometric measurements were taken on each participant. Some of the measurements included heights, girths, skinfolds and breadths. Skinfold measurements were further used to calculate body composition and somatotypes. The following physical fitness components were included for assessment: flexibility (sit-and-reach test); grip strength (hand grip dynamometer); leg power (standing long-jump); speed (50m-sprint test); and cardiovascular endurance (three-minute step test). The relationship between growth and fitness characteristics was determined by means of a stepwise discriminant analysis. The participants were divided into ‘under 13’ and ‘13 and older’ groups and were used to establish differences in the relationships between growth and fitness. The analysis showed the prominence of weight and height as predictors of fitness parameters, especially strength, speed and leg power.

Key words: Boys; Growth; Physical Fitness; Correlation; Stepwise discriminant analysis.