ANTHROPOMETRIC, PHYSICAL AND MOTOR PERFORMANCE DETERMINANTS OF SPRINTING AND LONG JUMP IN 10-15 YEAR OLD BOYS FROM DISADVANTAGED COMMUNITIES IN SOUTH AFRICA

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ABSTRACT

The most talented subjects (N = 39) were selected from 66 boys by means of a Talent Search testing protocol and then subjected to a sport specific test battery consisting of five anthropometric and 16 physical and motor variables. The results indicated that mean anaerobic power output, acceleration, body mass, reaction time, iliopsoas flexibility, speed endurance, sitting height, age and push-ups contributed to 86.5% of the total variance to performance in the 100 meter sprint. Horizontal jump, age, acceleration and ankle flexibility contributed to 81.5% of the total variance in the performance of the long jump. These anthropometric, physical and motor abilities can enable the coach and Sport Scientist to classify the talent of 10-15 year-old boys for sprinting and long-jumping athletes, and then to develop the potential of the athlete accordingly.

Key words: Talent identification; Sprinting; Long-jump; Prediction of performance; Physical and motor fitness; Kinanthropometry.