Background
Media concerns and anecdotal stories about low levels of fitness and increased sedentary behaviour amongst today’s students and the possible impact of this on their current and future health have led to numerous suggested “solutions” to the ‘problem’ such as using fitness tests of children to profile their health status. ACHPER (SA) believe it important that policy-makers and teachers work from an informed base in order that any actions taken to address concerns about the health status of children are relevant, meaningful and effective.

Research
Harris & Cale (2006) suggest fitness testing children can be problematic on the following points:
- the appropriateness of some fitness tests for use with children is questionable (e.g. the Multistage Fitness Test was developed for use with elite, adult populations);
- a child’s metabolic, cardiopulmonary, thermoregulatory, and perceptual responses to exercise are different from those of adults;
- the reliability and validity of some fitness tests for use with children are questionable and the need for additional evidence of the reliability and validity of tests and test batteries has been identified;
- concerns about reliability and validity are associated with a requirement for administrative rigour (protocol adherence) and teachers’ relatively limited direct experience of test administration;
- concerns about reliability and validity also stem from the fact that many factors influence children’s performance on fitness tests and will be reflected in fitness test scores, namely: the environment/test conditions (temperature, humidity, wind speed/direction); lifestyle (exercise/nutrition); test protocol/procedures; motivation, intellectual and mechanical skill at taking the test; heredity or genetic potential; and maturation.

Harris & Cale (2007) and Rice (2007) warn that fitness testing may contribute to diminished student interest and participation in physical education. Fitness tests, however, appeal to students who do well in the tests (Harris & Cale, 2007; Garrett & Wrench, 2008).

Percentile based evaluative feedback fitness tests (or criterion referenced tests) confound the issue of relative fitness by failing to take maturation into account (Harris & Cale, 2006). For example:

The Uniqueness of Preadolescent Children

- Large differences in chronological and skeletal age
  - skeletal age varies up to three years on each side of chronological age
- Oddly proportioned bodies – big heads and little bodies

A purpose of fitness testing is not only to report but to motivate fitness seeking behaviour (physical activity) and increase fitness knowledge (Harris & Cale, 2006). To that end, students report little understanding of why they had to complete the tests and they viewed them as a painful, negative experience that was little fun (Hopple Graham, 1995). Adolescents who receive negative feedback about their performance in a fitness test report lower self-esteem and less motivation to participate in physical activity (Department of Education and Children’s Services, 2004). Where fitness testing is
presented as an educational context the complexity of the relationship between health, fitness and physical activity tends to be diluted (Garrett & Wrench, 2008).

It is also important to note that a child’s activity level cannot be judged by their fitness level. The relationship between fitness and physical activity level is low among children (Armstrong & Welshman, 1997) whereas in adults the relationship appears clear (Harris & Cale, 2006).

The SPANS report (NSW Health) showed a higher proportion of healthy weight children showed advanced mastery of fundamental movement skills while children who do not develop physical skills are those who get left out of play with their friends and could be those who remain physically inactive throughout life. Research has also reported that overweight students were more likely to possess low levels of Fundamental Movement Skills than those who weren’t overweight (Okely et al 2004).

Policy

1. ACHPER (SA) recommends physical education be focussed on the process of being physically educated (e.g. skill mastery, health promoting behaviours etc.) rather than the product (fitness) which will then inevitably lead to students measurably improving their own fitness (Whitehead & Corbin, 1991).

2. ACHPER (SA) believes that where fitness testing occurs in physical education it should be about the promotion of learning and not the reporting of percentile-based evaluative data.

Accepted and endorsed by the ACHPER (SA) Board- February 5, 2013

References


