ACHPER SA
Position Statement
Fitness Testing and School Physical Education

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.

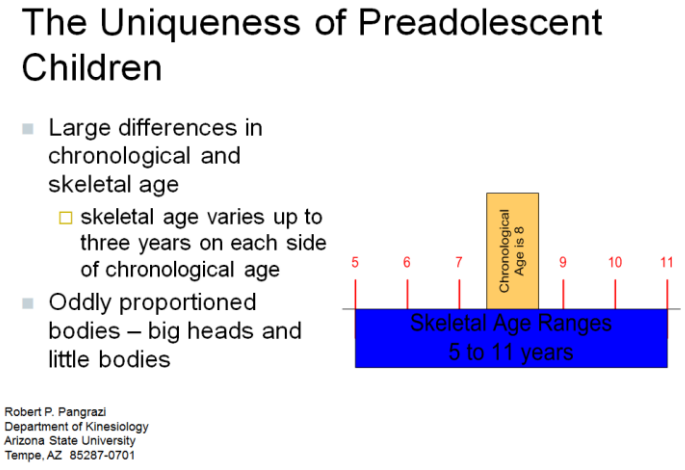
Research

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 (eg. 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:



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).

What does the evidence say about fitness testing?
The most common fitness tests include the 'beep test', 'sit and reach test' and the 'Cooper run'. Research shows that:

- Most Secondary HPE teachers carry out fitness testing at least once per year with each class/grade
- Some children enjoy participating in fitness testing
- Some children find fitness testing painful, embarrassing and shameful, and these feelings can persist into adulthood, to damaging effect
- Children's experiences of fitness testing are not always meaningful or educational
- There is no evidence that fitness testing is successful in promoting healthy lifestyles, physical activity, or developing the required knowledge and skills for lifelong physical activity
- In addition, 'school-based challenges' and 'body image' feature in the top four issues of personal concern for young Australians.

Alfrey also suggests that we can begin to envisage fitness testing that:

- Has a clear learning intention and educative purpose
- Is relevant and meaningful to all students' lives
- Is not rushed, and students have the time to explore, critique and learn in, through and about fitness testing
- Provides opportunities for students to reflect on the process and identify what they have learned, how they feel, how the experience is meaningful and useful to their day-to-day-lives etc

Before undertaking fitness testing she suggests that it is also important to ask a series of critical questions about how the tests will be conducted.

- Will students carry out the testing as a group, in a circuit, at home/individually?
- Is the testing carried out in isolation or is it linked to other learning experiences throughout the term/year?
- Can students choose which tests they participate in?
- Do students have to participate in validated tests or can they develop their own?
- How will the data be collected? Who will collect it? For what purpose?
- Do you have a mechanism for knowing how the fitness testing process is making your students feel? (Alfrey, 2022)

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.**

References

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