

**UNIVERSITI TEKNOLOGI MARA**

**THE RELATIONSHIP BETWEEN  
FAT MASS, CARDIOVASCULAR  
FITNESS AND PHYSICAL  
SELF-DESCRIPTION AMONG  
MALE CHILDREN**

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Dissertation submitted in partial fulfilment of the  
requirements for the degree of  
**Master of Sport Science**

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## **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my work, unless otherwise indicated or acknowledge as references work. This dissertation has not been submitted to any other academic institution or non-academic institution for any degree of qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Postgraduate, Universiti Teknologi MARA, regulating the conduct of my study.

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## ABSTRACT

The ongoing epidemic of obesity in children has highlighted the importance of body fatness for health and its consequences for childhood physical self-description. The purpose of this study was to determine the correlation between fat mass, cardiovascular fitness and physical self-description among male children aged 10-12 years old. One hundred and fifty six school children were involved. The participants were 16% underweight, 46% normal weight, 13% overweight and 24% obese. Fat mass (FM) was measured by taking triceps and subscapular skinfold thickness, cardiovascular fitness (CVF) was measured using six-minute walk test (6MWT) and physical self-description was measured using Physical Self-Description Questionnaire (PSDQ). Average distance walked differ from each BMI group (underweight  $643\pm 77$  m ; normal weight  $616\pm 81$  m ; overweight  $622\pm 101$  m and obese children  $597\pm 73$  m). This study found that FM does not have any relationship with cardiovascular fitness. Overall physical self-description does not significantly related with fat mass but had significant relationship with cardiovascular fitness. This shows that Malaysian urban children were more concern about their cardiovascular fitness and less attention were paid towards their physical self-description.

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