UNIVERSITI TEKNOLOGI MARA

RELATIONSHIP BETWEEN WAIST TO HEIGHT RATIO AND CARDIOVASCULAR ENDURANCE, MUSCULAR ENDURANCE AND FLEXIBILITY AMONG CHILDREN

By

LIELIS ATHIRA BINTI AMIR

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DECLARATION OF ORIGINAL WORK

BACHELOR OF SPORTS SCIENCE (HONS)

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UNIVERSITI TEKNOLOGI MARA (UiTM) PAHANG

I, LIELIS ATHIRA BINTI AMIR (I/C Number: 921221-08-6466)

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I/C Number : 921221-08-6466

UiTM ID : 2012783617

DATE : January 2015

ABSTRACT

Relationship between Waist to Height Ratio (WHtR) and Cardiovascular endurance, Muscular endurance and Flexibility among Children

The relationship between excess body fat and physical fitness are important to explore because emphasis is placed on monitoring these markers during interventions aimed at improving child health.The purpose of the study was to know the relationship between Waist to Height Ratio(WHtR) and physical fitness among children.This study was using purposive sampling technique. All subjects were included in a total of 40 person of children aged 10 to 12 years old recruited. SPSS version 20.0 was used. Pearson's product moment correlation and were implemented in order to find the correlation between WHtR and physical fitness of the subject. The results show there was a significant negative correlation between Waist to Height Ratio and cardiovascular endurance (-0.512) and for muscular endurance (-0.720). The results also show there was a weak correlation between Waist to Height Ratio and flexibility (0.142).When examining the relationship between body fatness measurements with physical fitness an increase in waist to height ratio was associated with reduced cardiovascular and muscular endurance in children. The WHtR is simple measure to use in children to assess risk of excess adiposity and poor physical fitness.

Keywords: Waist to height Ratio, excess adiposity, physical fitness

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