

UNIVERSITI TEKNOLOGI MARA

**THE RELATIONSHIP BETWEEN DIGIT RATIO AND
ANAEROBIC TRAINABILITY STATUS AMONG
FEMALE YOUTH**

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ABSTRACT

Digit ratio is a major area of interest within the field of talent identification which acts as a marker of the prenatal testosterone towards the development of human brain, physical ability and it also related to behaviour. It can be defined as ratio of the finger length between the index (2D) and the ring (4D) finger and it also known as 2D:4D ratio. Furthermore, males tend to have the lower mean of digit ratio rather than females. Nowadays, the enhancement of the sports and its relation to the digit ratio increased because digit ratio is one of biomarker towards talent identification in sports. Young athletes may engaged in sports when they easily adapt and improve with the training given by their coach but in recent of sport performance show that trainability of the young athletes regarding the anaerobic improvement is given less attention compared to the strength or aerobic fitness. Trainability is known as the process of the young children to mimics the training that has been given to them. A rapid improvement in fitness may encourage the young children to respond into their training regarding the fitness component. The participants was purposively selected and taken their demographic data and hand scan before engage with six week plyometric intervention. Pre and post test of vertical jump test was use to see an improvement after the intervention. The statistical analysis involved Pearson Product Moment Coefficient of Correlation (r) and Paired Sample T-Tests. There is no significant correlation between right-left digit ratio with anaerobic power (trainability). Besides, it showed significant difference between pre and post test for vertical jump test. As conclusions, there digit ratio are not related to power but more likely related to aerobic exercise.