

UNIVERSITI TEKNOLOGI MARA

**DIFFERENT MAXIMAL OXYGEN
UPTAKE BETWEEN BEEP TEST AND
STEP TEST AMONG YOUNG MALE
ADULTS**

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Research Project submitted in partial fulfillment of
the requirements for the degree of
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AUTHOR'S DECLARATION

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

I hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Under Graduate, University Teknologi MARA, regulating the conduct of my study and research.


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ABSTRACT

There many studies had been done in measuring maximal oxygen uptake in different method of exercise which is field test or laboratory test. Since both method proved a reliable and valid test and seem there nor study had been done in comparing mean difference on reliable and valid method especially in field test as it was easy to be conducted. The main purpose of this study is to determine the different of maximal oxygen uptake between beep test and step test among young male adults. An experimental test was conducted among young male adults in Makmal Unit Sains Sukan Universiti Sains Malaysia, Kubang Kerian Kelantan. Descriptive statistic, Independent t-test and Pearson Correlation were used in the data analysis. 12 participants were chosen to involve in this study derived by Cohen's formula (DJ Bentley, 2003). The study protocol used beep test protocol (Angeles, 2015) and Queen College step test protocol (Human Kinetic). The result was significant difference of maximal oxygen uptake between beep test ($M=36.13$, $SD=4.52$), and step test ($M=44.48$, $SD=4.44$, $t(22)= -4.57$, $p=.001$) with mean difference of -8.35 . The magnitude of the difference in the mean was very large effect ($\eta^2=.23$). This study indicate that beep test and step test among young male adults were moderately correlated, $r(12) = 0.376$, but $p\text{-value} > .001$ was not significant. Therefore we conclude that there is no strength of relationship between beep test and step test.

Keywords: maximal oxygen uptake, cardiorespiratory fitness, beep test and step test

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