

**UNIVERSITI TEKNOLOGI MARA**

**THE COMPARISON OF STRENGTH, POWER  
AND FLEXIBILITY BETWEEN ON-ROAD  
CYCLIST AND OFF-ROAD CYCLIST**

**NURUL NAEMAH BINTI ZULKUFLY**

Thesis submitted in partial fulfillment  
of the requirements for the Degree of  
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## AUTHOR'S DECLARATION

I, Nurul Naemah binti Zulkufly (I/C Number: 950826-11-5242) 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 work has not previously been accepted in substances of any degree, locally or overseas and not being concurrently submitted for any degrees.

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Name of Student : NURUL NAEMAH BINTI ZULKUFLLY

Student I.D. No. : 2015144821

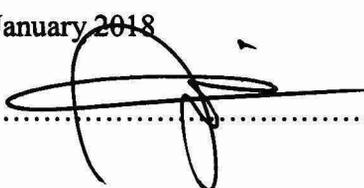
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Signature of Student :  .....

Date : January 2018

Signature of Supervisor :  .....

## **ABSTRACT**

Cycling is a sports activity that requires strength, power and flexibility. The objective of this study is to measure and compare the leg strength, leg power and the flexibility among the on-road cyclist and off-road cyclist. 20 cyclist has involves in this study (N=10) from on-road cyclist and (N=10) from off-road cyclist. Subjects performed the 1RM leg press test to measure strength, vertex pole vertical jump to measure power and sit and reach to measure flexibility. Data analysis was analysed using the independent t-test. The results show there was no significance difference on strength, power and flexibility between on-road and off-road cyclist because of the  $p>0.05$ . However, the results show there is slightly difference between on-road and off-road cyclist based on the indicators it is because of the nature of the sports. As conclusion, to have a better performance of cycling, athletes should be trained specifically according to the fundamentals of the sports. The developments of fundamentals for on-road and off-road cycling events are important in order to have a better cyclist in the future.

**KEYWORDS** : Cyclist, Strength, Power, Flexibility

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