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OXYGEN LEVEL AND HEART RATE RESPONSE DURING HIGH ALTITUDE CLIMBING AMONG KINABALU MALIM GUNUNG AND FELDA EVEREST CLIMBER

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BACHELOR OF SPORTS SCIENCE (HONS.)

2016

DECLARATION OF ORIGINAL WORK
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This research project was the best result of my independent work and investigation, except, where otherwise states. I absolve UniversitiTeknologi MARA (UiTM) and it is Faculty of Sport Science and Recreation from any blame because of my work.

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ABSTRACT

Introduction: This study measured oxygen level and heart rate response among Kinabalu Malim Gunung and Felda Everest Climbers in order to compare oxygen level and rate of heart beat per minute. Mount Kinabalu is the highest peak in Malaysia with the height of 4095.2m from sea level and Mount Everest is the highest peak in the world with the height of 8848m from sea level. The possibility to get altitude sickness is high as people tend to get altitude sickness at the height of 2500m above sea level. Hence, oxymetry test was done to compare oxygen level and heart rate response among Kinabalu Malim Gunung and Felda Everest Climber.

Objectives: The purpose of this study is to compare oxygen level and heart rate between Kinabalu Malim Gunung and Felda Everest Climber at height 1800m, 2400m, 3000m and 3600m.

Method: Kinabalu Malim Gunung and Felda Everest Climber is a two different categories and were measured using the finger pulse oxymeter. The independent variable (IV) is representing the Kinabalu Malim Gunung and Felda Everest Climber and dependent variable (DV) will be representing on oxygen level and heart rate. 15 Kinabalu Malim Gunung and Felda Everest Climber were tested using finger pulse oxymeter and the Oxygen Level (%), Heart Rate (bpm) was measured. Mean and (SD) age for Kinabalu Malim Gunung; 27.93 ± 3.60, height; 173.60 ± 4.81 and weight; 69.00 ± 5.46. Mean and SD for age Felda Everest Climber; 25.00 ± 2.45, height; 166.73 ± 4.42 and weight; 63.13 ± 6.89. The data collected have been analyzed using Statistical Package for Social Science (SPSS) version 19.0.

Result: The results show that oxygen level have significant difference at height 1800m, 2400m, 3000m and 3600m. For heart rate, the results show that there is significant difference at height 1800m, 2400m, 3000m and for height 3600m there is no significant difference between Kinabalu Malim Gunung and Felda Everest Climber.

Conclusion: Kinabalu Malim Gunung had good oxygen level (%) and heart rate (bpm) compared to Felda Everest Climbers. It is important to monitor the oxygen level and the heart rate at high altitude and extreme altitude. This is to make sure that the climbers are in a good condition.

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