# RELATIONSHIP BETWEEN EVENING EXERCISE AND LATE- NIGHT EXERCISE TOWARDS HEART RATE RECOVERY (HRR) AND SLEEP QUALITY AMONG MALE YOUNG ADULT IN UITM PAHANG 

## By <br> NOR BALQIS BINTI MOHD SAID

(2012728515)

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# DECLARATION OF ORIGINAL WORK 

## BACHELOR OF SPORTS SCIENCE (HONS)

## FACULTY OF SPORTS SCIENCE AND RECREATION UNIVERSITI TEKNOLOGI MARA PAHANG

I, NOR BALQIS BINTI MOHD SAID (I/C Number: 920206-01-6000)

Hereby, declare that:

This work has not previously been accepted in substance for any degree, locally or overseas, and is not being concurrently, submitted for this degree or any other degree.

This project paper is the result of my independent work and investigation, except otherwise stated. I absolve UniversitiTeknologi MARA and Faculty of Sports Science and Recreation from any blame as a result of my work.

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I/C Number : 920206-01-6000
UiTM ID : 2012728515
Date : JANUARY 2015


#### Abstract

The purpose of this study is to investigate the relationship between evening exercise (EE) and late-night exercise (LNE) towards heart rate recovery (HRR) and sleep quality among male young adult in UiTM Pahang. There were 30 male young adult that actively playing futsal who participated in the study, age ranging from 18 to 23 years old. The subject were equally divided into two groups; evening exerciser ( $n=15$ ), late-night exerciser $(\mathrm{n}=15)$. The dependent variable in the study was Three Minutes Step Test and answering the Pittsburgh Sleep Quality Index (PSQI) questionnaire. Based on Independent T-test analysis and Pearson's Correlation, there is significant different ( $p<0.05$ ) was showed between heart rate after two minutes testing and sleep quality among evening and late-night group of exercises [ $M=$ 84.40, $S D=6.197],[M=77.60, S D=6.599]$. Also, there is significant different between heart rate after testing and heart rate after two minutes testing among evening and late-night exercises [HR after testing: (EE) $M=106.80, S D=8.841$ ] [(LNE) $M=118.80, S D=4.057]$, [HR after two minutes testing (EE) $M=84.40, S D$ $=6.197][(L N E) M=77.60, S D=6.599]$. However, there is also resulted correlation between heart rate recovery and sleep quality [ $\mathbf{p}<0.05$ ]. Different time of exercises were analyzed as to examine level of heart rate recovery (HRR) and sleep quality among male young adult. Another finding in this study were there is correlation between HRR and sleep quality. In current study, there is significant relationship between evening and late-night exercises towards HRR and sleep quality. In this study, it can be concluded that, any of time in a day could involved in a physical activity, as long as the intensities, frequencies, and sets are under control.


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