# UNIVERSITI TEKNOLOGI MARA

# COMPARISON BETWEEN 4 MINUTES AND 8 MINUTES OF RESTING INTERVAL ON SPRINTING PERFORMANCE AMONG ADOLESCENT ATHLETES

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Thesis submitted in partial fulfilment of the requirements for the degree of **Bachelor of Sport Science (Hons.)** 

Faculty of Sport Science and Recreation

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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 Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and

research.

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#### **ABSTRACT**

The purpose of this study is to compare the differences between 4 minutes of rest interval and 8 minutes of resting interval on sprinting performance among adolescent athletes. A total of thirteen subjects (N=13) of Selangor Sports School athletic athletes was selected through purposive sampling. This study compared the differences between 4 minutes and 8 minutes of rest interval on sprinting performances. On the first day session, all of the subjects performed the plyometric (Post-activation Potentiation) exercise which is the athletes performed 3 sets of 10 alternate-leg bounds (5 contacts per leg per set), with 25 seconds each set recovery time with 4 minutes of rest interval after completed the 3 sets. The 30 meter sprint time was measured with a handheld stopwatch immediately after 4 minutes of the rest interval. On the second day session of this study, the same method was used for 8 minutes of rest interval on sprinting performance. Paired Sample T-test was used to analyze the data between 4 minutes and 8 minutes of rest interval on sprinting performance. The hypothesis was significant differences between 4 minutes and 8 minutes of rest interval after Post-Activation Potentiation activities on sprinting performance (M=0.08, sd = 0.03). The overall result also indicated that 4 minutes of rest interval on sprinting (M = 4.22, sd = 0.10) was better than 8 minutes of rest interval on sprinting (M=4.31, sd = 0.11). Hence, from this study, the result can conclude 4 minutes of rest interval has been associated with better muscular explosives and helps in improving the sprinting performance.

Keyword: Athletics, sprinting, rest interval, speed, plyometric

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