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THE EFFECTS OF POST WARM-UP RECOVERY TIME ON SPRINT PERFORMANCE

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Research Project submitted in partial fulfilment of the requirement for the degree of

Bachelor of Sports Science (Hons.)

Faculty of Sports Science and Recreation

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AUTHOR'S DECLERATION

I declare that the work in this research project was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicate or acknowledge as referenced work. This research project has not been submitted to any academic institution or non- academic institution for any degree or qualification.

I, hereby, acknowledgement that 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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The Effects of Post Warm-Up Recovery Time on Sprint Performance

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Abstract

A warm-up was designed to prepare the body physiologically and has potential to improve performance. One of the factor that influenced the effectiveness of warm-up on performance is recovery time between warm-up and the event. However, there is limited evidence of recovery time on sprinting performance. The aim of this study was to investigate the effects of post warm-up recovery time on sprint performance. Fifteen male recreational athletes were recruited in this study. This study is a repeated-measures study design consists of different recovery time as exposures. Participants exposed to four exposures; 3 minutes of recovery time (3 RT), 5 minutes of recovery time (5RT), 10 minutes of recovery time (10RT) and 20 minutes of recovery time (C) of post warm-up. Participants performed a general warm-up of 5 minutes jogging at self-pace and five exercises of dynamic stretching before undergo the recovery time exposure and proceed to 20m sprint test. Participants underwent 48 hours recovery period before the next exposure. Participants completed the exposure in a randomised order. The data was analysed by using one-way ANOVA with repeated-measures. As results, 5RT (5.73%) had significantly improved sprint performance ($p \leq 0.001$) when compared to control. Sprinting time of 3RT and 10RT were significantly slower compared to 5RT with 5.41% ($p \leq 0.01$) and 3.82% ($p \leq 0.006$). The possible reason 5RT is suitable to improve sprint performance might due to shorter period that helped in maintain an elevated core temperature compare to longer rest period. In conclusion, the present study found that 5 minutes of post warm-up recovery time is the most effective recovery time for sprint performance.

Keywords*: post warm-up, recovery time, sprinting performance.*

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