

UNIVERSITI TEKNOLOGI MARA

**THE EFFECT OF COLD WATER IMMERSION AND
PASSIVE REST ON RECOVERY OF PERFORMANCE
AMONG SPRINTER ATHLETE**

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Thesis submitted in partial fulfillment
of the requirements for the degree of
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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

Recovery technique can help less fatigue, increase the level of athletes, fitness and also improve performance. The main purpose of this study was to study the effect of cold water immersion and passive rest on recovery of performance among sprinter athlete. 14 young athletes were selected and have been divided into two groups that were cold water immersion group (n=7) and passive rest group (n=7). Subject performed three tests that is 35 meter sprint, standing broad jump and sit and reach. Before the athletes do the test, they warm up themselves for 10 minutes. After that they do the recovery technique which was for 15 minutes and then they did the same tests. Data analysis was analysed using paired samples test which was pre-test and post-test. The results shows that there was significant effect of cold water immersion on performance, there was significant effect of passive rest on performance and there were significant different on cold water immersion and passive rest on performance. Cold water immersion result for 35 meter sprint ($p = 0.001$), standing broad jump ($p = 0.030$) and sit and reach ($p = 0.002$) which is showed the decrease of performance and then for passive rest the result in 35 meter sprint ($p = 0.040$), standing broad jump ($p = 0.042$) and sit and reach ($p = 0.000$) which is showed the improvement. Conclusion of this study might say that passive rest is good recovery technique for short period of time and cold water immersion is good for long period of time.

Keywords: Cold water immersion, passive rest, skill related fitness, sprinter and SSMT (Sekolah Sukan Malaysia Terengganu)

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