

UNIVERSITI TEKNOLOGI MARA

**ACUTE EFFECT OF SELF-MYOFASCIAL RELEASE ON
40M SPRINT PERFORMANCE**

MUHAMAD ADAM BIN MOHD ROSLAN

BACHELOR OF SPORTS SCIENCE (Hons.)

FACULTY OF SPORTS SCIENCE AND RECREATION

UNIVERSITI TEKNOLOGI MARA, PAHANG

JANUARY 2015

DECLARATION OF ORIGINAL WORK
BACHELOR OF SPORTS SCIENCE (HONS)
FACULTY OF SPORTS SCIENCE AND RECREATION
UNIVERSITI TEKNOLOGI MARA (UiTM) PAHANG

I, MUHAMAD ADAM BIN MOHD ROSLAN (920224-14-5383)

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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 Universiti Teknologi MARA (UiTM) Pahang and Faculty of Sports Science and Recreation from any blame as result of my work.

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I/C Number : 920224-14-5383

UiTM ID : 2012748893

Date : JANUARY 2015

ABSTRACT

Self-myofascial release (SMR) is a therapy introduced by John F. Barnes which means the manual technique of massaging and stretching the targeted muscle(s) to eliminate the restrictive barriers between layers of fascia tissue. SMR can be used as a tool for conditioning programs to enhance skeletal muscle functions. The purpose of this study is to investigate the effect of SMR on 40 m sprint time performance among the football players of the Klang Valley League. A total of 44 football players of the Klang Valley League were recruited to become the subjects for this study and divided into two different groups; control (CG) and experimental (EG). They performed a general warm up of 1km jogging at self-pace and continued with the 40 m sprint pre-test. There was a 4 minutes rest before the CG started the post-test. After the pre-test, EG applied the SMR which focus on major muscles group of the leg; gastrocnemius, hamstring, quadriceps and gluteus, at 6 strokes per minute for 30 seconds. After the intervention, they performed the 40 m sprint post-test. The subjects were measured for speed twice following two (2) build-up practice runs at their submaximal effort. The faster of the two trials indicated speed to the nearest .1 second. The data obtained from this study were all tabulated and analyzed using the IBM SPSS Statistics Version 20. Paired Sample T-Test was utilized to investigate the differences in the pre-test and post-test of both control group and experimental group. The result from this study indicated that the control group showed a significant difference ($p < 0.05$) between the pre-test and the post-test. The experimental group showed no significant difference ($p > 0.05$). It can be concluded that the control group showed a significant difference as compared to the

experimental group. The application of SMR can influence the performance in the 40 m sprint.

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