UNIVERSITI TEKNOLOGI MARA

THE ACUTE EFFECT OF POST-ACTIVATION POTENTIATION TOWARDS UiTM PAHANG PANTHER RUGBY PLAYERS

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Research Project Report submitted in partial fulfilment of the requirements for Bachelor of Sports Science (Hons.)

Faculty of Sports Science and Recreation

January 2019

ABSTRACT

The purpose of this study was to investigate the acute effect of the post-activation potentiation (PAP) on standing broad jump performance and power estimation in standing broad jump among amateur rugby player. A total of sixteen (N=16) from UiTM Pahang Panthers Rugby Player were selected using the purposive sampling. The study was compared the differences between standing broad jump performance before and after performing the PAP exercise. Besides that, the power estimation of the standing broad jump before and after performing the PAP also calculated. A statistical analysis which is Sample Paired T-test from SPSS 23 was run due to this study was included the pre and post-test using a group of the subject. During the pre-test, all of the subjects will perform the three trials of standing broad jump with the 30 seconds of rest interval between trials. After they perform the PAP exercise which is one repetition maximum of back squat, they rest for 8 minutes and perform the post-test of standing broad jump using the same protocols from pre-test. According to the results from Sample Paired T-test, there is significance difference between pre and post-test of standing broad jump after perform the PAP exercise ($p=0.002$) and the overall results for pre-test of standing broad jump ($M = 2.34$ $SD = .22$) which is lower than post-test of standing broad jump ($M = 2.43$ $SD = .23$). Besides that, the results from Paired Sample T-test for estimation of power in pre and post-test of standing broad jump also show the significant difference ($p=0.002$). The overall results were indicated that standing broad jump performance without PAP exercise ($M = 1652.29$ $SD = 366.05$) was inferior to the standing broad jump with PAP exercise ($M = 1796.10$ $SD = 384.81$). To conclude, this study suggests that PAP exercise gives effect in standing broad jump performance toward the amateur rugby player and it gives the positive effects to the athlete to perform better in future.

KEYWORDS: Rugby, Post Activation Potentiation, Standing Broad Jump, One Repetition Maximum, Power, Strength,

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