## UNIVERSITI TEKNOLOGI MARA

# ACUTE EFFECT OF SELF-MYOFASCIAL RELEASE USING ROLLING BAR ON LOWER LIMB FLEXIBILITY AMONG ADOLESCENTS

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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 investigate the acute effect of self-myofascial release (SMR) using rolling bar on lower limb flexibility among adolescents. A total of twenty- four subjects (N=24) from Sekolah Sukan Seberang Temerloh, Pahang were selected through purposive sampling. The study compared the result of pre-test and post-test of sit and reach test before and after applying the treatment of self-myofascial release using rolling bar. All of the subjects will perform two trials for each test. They will perform sit and reach test for the pre-test and directly apply the treatment of self-myofascial release using rolling bar, and then immediately do the post-test for sit and reach test. Sit and reach box is the instrument used to measure the distance of hand reach. This study used Paired Sample T-test for the data analysis. There is a significant effect of the hypothesis testing for the sit and reach between pre-test and post-test which is M = 2.2500, SD = .3040). To conclude, this finding suggests self-myofascial release using rolling bar produce significant acute effect on lower limb flexibility.

KEYWORDS: Self-myofascial release, flexibility, sit and reach

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