### **UNIVERSITI TEKNOLOGI MARA**

# DIFFERENCE KINEMATICS IN INSTEP KICKING BETWEEN DEVELOPMENT AND ELITE GROUP OF YOUTH SOCCER PLAYER

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Research Project submitted in partial fulfilment of the requirement for the degree of Bachelor of Sports Science (HONS.)

**Faculty of Sport Science and Recreation** 

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#### **AUTHOR'S DECLARATION**

I declare that the work in this research 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 indicates or acknowledge as references work. This research project has not been submitted to any other academic institution or non-academic institution for any degree of qualification.

I, hereby, acknowledge that have been supplied with Academic Rules and Regulation for Under Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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#### **ABSTRACT**

This study tend to analysed the instep kicking kinematics between the development and elite group of youth soccer player that were lack and not clearly discussed in the previous literature. The purpose of this study was to compare the difference of instep kicking kinematics between the development and elite group of youth soccer player. Through this study, identification of the most important mechanisms that underwrite to a fast or an accurate kick as well as the role of specific kinematics in countless phases of the kick. There were 28 participants and they were divided into two groups, 14 from elite groups (n=14) and 14 from the development groups (n=14). Participants were involved in kicking drill by using the instep portion. There were asked to kick to a target, which is positioned at the bottom left of the goal post. Researcher also asked the participants to do the kick with most powerful and most accurate shot that they can. The result were determined by using Independent ttest to show the difference which the result showed there are significant difference between development and elite group for accuracy (p=<0.000), The mean and standard deviation reading, M(sd) for the development group 0.21(0.469) and 1.07(0.267) for the elite group. Meanwhile another variable for elite 135.29(7.021) and development group 152.57(15.037) on angle of the supported knee during contact with the ball in the shooting phase also showed significant difference (p=0.001). Regarding all the result obtained, lowering the center of gravity is directly proportional to higher rate of on target in kicking. Lowering of center gravity caused more stability. Other than that, accurate kick were usually slower than a powerful kicks

Keywords: instep, kinematics, elite, development

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