

UNIVERSITI TEKNOLOGI MARA

**COMPARISON OF SPEED, AGILITY AND
CARDIOVASCULAR BASED ON PLAYING
POSITION IN HOCKEY**

By

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DECLARATION OF ORIGINAL WORK
BACHELOR OF SPORTS SCIENCE (HONS)
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ABSTRACT

In Malaysia, study about hockey is not extensively particularly in regards to fitness level among position in hockey. There are constrained studies has been carried out in Malaysia. Based on result from the study, the results can facilitate coach to develop proper training program specific based on playing position. Moreover, measuring fitness levels will encourage the athletes to enhance their performance thus excel in hockey their physical fitness important for success. It can be a determinant to develop in which the fitness component lacks in. Hence, the purpose of this study were to determine the level of speed, agility and cardiovascular in different playing position among male hockey player. Twenty-two male hockey players participated in this study. There are 6 forward, 6 midfielder, 6 defender and 4 goalkeepers completed the entire three fitness test including 30 meter sprint to measure speed, Illinois Agility Run to measure agility and Multistage Fitness Shuttle Run (MFSR) in order to measure cardiovascular. The result showed significant difference ($p < 0.05$) in speed between positions in male hockey player. Agility showed no significant difference ($p > 0.05$) between playing positions among male hockey player. Cardiovascular showed significant difference ($p < 0.05$) between playing positions among male hockey player. It was concluded that the results of the study show significant difference in speed and cardiovascular between positions in hockey. Based on the result, forward have greater speed as a positional demand in attacking play to score a goal meanwhile midfielder have found to have a higher VO_{2max} than forward, goalkeeper and defender. It was recommended that player must have specific fitness level based on playing position.

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