

The background of the entire cover is an abstract, high-energy image. It features a blurred figure of a person, likely a runner, in motion. The figure is overlaid with vibrant, streaky light trails in shades of teal, blue, and orange, creating a sense of speed and dynamic movement. The overall composition is energetic and modern.

INTERNATIONAL GRADUATE COLLOQUIUM

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COLLOQUIUM PROCEEDINGS

EXTENDED ABSTRACT

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THE EFFECTS OF INCORPORATING A HOCKEY STICK IN SPEED, AGILITY, AND QUICKNESS (SAQ) TRAINING ON THE SPEED AND AGILITY OF YOUTH FIELD HOCKEY PLAYERS

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I. INTRODUCTION

This study investigates the effects of incorporating a hockey stick into Speed, Agility, and Quickness (SAQ) training for youth field hockey players. By addressing the lack of sport-specific adaptations in conventional training [1], it aims to improve speed and agility, offering evidence-based insights for enhancing performance through a novel Hockey Stick-enhanced SAQ (H-SAQ) program.

II. METHODS

Sixteen male youth field hockey players (ages 13–17) from Bukit Aman, Kuala Lumpur were divided into stick use (SU) and no stick (NS). A six-week Hockey Stick-Enhanced SAQ program with two 45-minute sessions per week featured drills like sprints, lateral jumps, and shuttles. Speed and agility were assessed pre- and post-training using the PSS-YP, anthropometric measures, 20-meter sprint, 20-meter sprint with a ball, and Illinois Agility Test.

III. RESULTS AND DISCUSSION

The results revealed significant changes across all performance metrics in both the SU and NS groups, emphasizing the efficacy of SAQ training. Specifically, speed decreased in the SU group (0.337–0.271 sec) but increased in the NS group (0.328–0.190 sec). In dribble speed, the SU group exhibited a reduction (0.529–0.337 sec), whereas the NS group showed an increase (0.163–0.168 sec).

Agility improved in the SU group demonstrating a marked reduction in (1.19–0.871 sec), while the NS group displayed an increase in time (0.693–0.871 sec). These findings suggest that incorporating sport-specific elements, like a hockey stick, enhances training specificity and agility, although further investigation is needed to explore its differential effects on speed and dribbling performance (Figure 1).

The integration of a hockey stick in SAQ training significantly enhanced speed and agility in youth field hockey players. This improvement suggests that sport-specific equipment optimizes neuromuscular adaptation, enhancing coordination and movement efficiency

[2]. The use of a hockey stick likely improves proprioception and task-specific motor skills, leading to better agility performance [3]. These findings align with research indicating that training specificity enhances skill transfer to competitive play [4]. Further research should explore long-term adaptations and optimal training protocols.

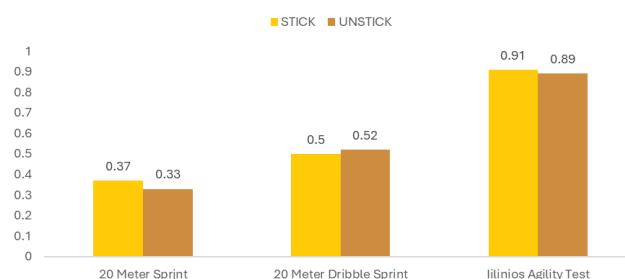


Fig. 1 Different in SAQ test pre- and post-intervention for Stick and Unstick groups (**significant difference between pre and post $p < 0.001$; *significant difference between pre and post $p < 0.05$).

IV. CONCLUSIONS

The incorporation of a hockey stick into SAQ training significantly improved speed and agility in youth field hockey players. This sport-specific modification demonstrated superior efficacy over conventional methods, providing evidence for integrating game-relevant elements into training programs. Findings emphasize the potential of SAQ training to optimize field hockey performance and contribute to advancing evidence-based training protocols for youth athletes.

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