# A COMPARISON REACTIVE AGILITY OF THREE STEPS

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## Introduction

In open-skill sports such as soccer, basketball, handball and rugby football, recognizing the play and making decisions can be as important as physical performance. Some studies investigated decision making for football players, such as change of direction speed and reactive agility. The purpose of this study was to compare three steps (side-step, shuffle, and split-steps) of reactive agility.

## Methods

The participants were 10 rugby union players, (mean $\pm$ S.D. age, 20.4 $\pm$ 1.5 years). Participants were instructed to recognize the front flashing light and sprinting through the gate flashed. First pair of timing lights positioned at start line. Second pair of timing lights positioned 1m front from the first lights. Third and fourth lights positioned approximately 40-50 degrees front right and left from the third lights. Reactive agility expressed as a total time, and it was divided into two dependent variables, *entry time*: time between first and second timing gate, and *exit time*: time between second and third or fourth lights.

## **Results & Discussion**

Data were analysed for forward players (FWs) and backs players (BKs). The results showed the entry time of side-step (0.28s) was significantly faster than both the shuffle (0.32s) and split-step (0.31s) in BKs players, whereas no significant in FWs players. The foot plant preparation, such as short steps and small hop, would make running speed decelerate before both the shuffle and split-step, whereas no speed deceleration before side-step because of no foot preparation in side-step.

#### Conclusion

Side-step had no speed deceleration before reacting signal light in BKs players.