

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.

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COLLOQUIUM PROCEEDINGS

EXTENDED ABSTRACT

EDITOR | ADAM LINOBY

THE EFFECTS OF HALF-TIME RE-WARM-UP PROTOCOLS ON SPEED, AGILITY, AND POWER IN RECREATIONAL FUTSAL ATHLETES

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I. INTRODUCTION

Re-warm-up (RWP) strategies during half-time breaks may sustain athletic performance and reduce injury risk [1,2]. This study investigates a three-minute RWP program's effect on futsal players' fitness performance (speed, agility, power) and compares RW with no RWP. Despite warm-up benefits, inactivity during breaks diminishes performance, underscoring RW importance [3].

II. METHODS

Sixteen recreational male youth futsal players were recruited based on training and competition criteria. A three-minute re-warm-up (RWP) which involved running, skipping, jumping, and sprinting drills were conducted during half time break. Fitness metrics including speed (20m sprint), agility (T-test), and power (broad jump) were measured pre- and post-intervention. Comparisons were made between RW and control conditions (fully rest).

III. RESULTS AND DISCUSSION

The three-minute RWP program significantly enhanced 10-meter sprint performance ($p < 0.001$). Furthermore, a significant decrease was shown in both agility and power (Figure 1). In contrast, passive rest reduced all variables tested (Figure 2).

Re-warmup significantly improved 10-meter sprint performance indicating its effectiveness in enhancing neuromuscular readiness and explosive acceleration [4]. However, the decrease in agility and power suggests that while RWP benefits linear sprinting, it may not sufficiently activate multidirectional movement and strength components [5]. Conversely, passive rest led to overall performance declines, reinforcing the necessity of dynamic preparation before activity [6].

Comparing RWP and control conditions, RWP mitigated speed and agility declines, and improved explosive power, emphasizing its effectiveness in sustaining performance during half-time breaks.

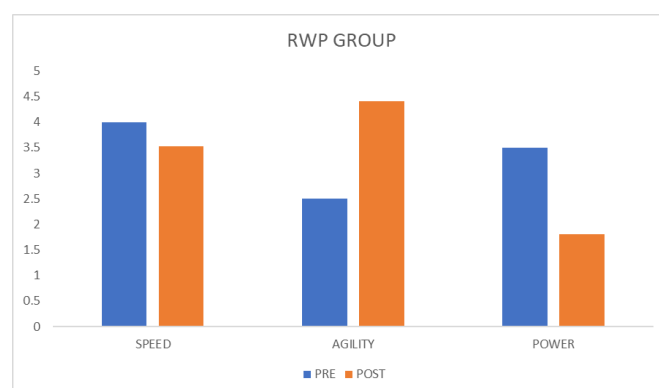


Fig. 1 Comparison of Pre- and Post-Intervention Performance Metrics in the RWP Group.

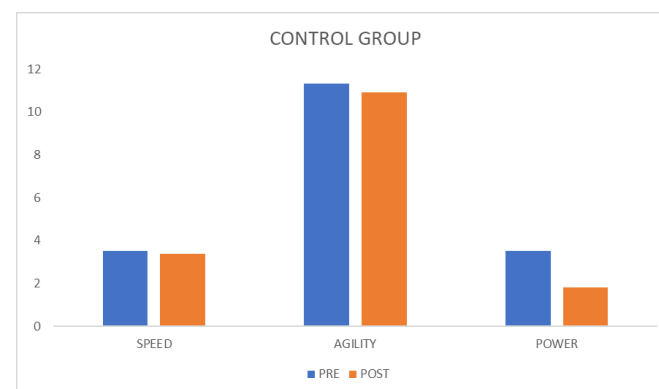


Fig. 2 Comparison of Pre- and Post-Intervention Performance Metrics in the Control Group.

IV. CONCLUSIONS

The short half-time re-warm-up improved speed but had little impact on agility and led to a sharp decline in power. While beneficial for speed, modifications are needed to better sustain agility and explosive strength in futsal players.

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