

## Comparing Plyometrics and Speed Training On Adolescent Badminton Players Agility: A Clinical Trial

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### Abstract

Badminton is very popular and demanding sport. The primary goal of every player and trainer is to increase performance. Common factors which influence performance are speed, stamina, agility, balance, mental attitude, flexibility, power, nutrition, etc. In this advancement era researches are focused towards evidence based practice to achieve more successful outcomes. This study is an attempt to compare the effect of plyometric training and speed training on agility in badminton players to provide evidence towards badminton players training. Forty participants (including both male and female subjects) ranging from 10-18 years of age, as per the inclusion and exclusion criteria were selected. The subjects were evaluated by T-test and Illinois test before and after 4 weeks. Each group was given training 3 times a week. Statistical analysis of the data was done using paired t test. Our results showed that a four week plyometric ( $p < 0.0001$ ) and speed training ( $p < 0.0001$ ) improved agility in adolescent badminton players. The present study also demonstrated that there was no any significant difference of age and gender on agility. Badminton game requires fast changes in direction, vertical jumps, forward lunges around the court. Badminton coaches should take place plyometric exercises and speed training in badminton training program.

**Keywords:** Badminton, Plyometrics, Agility, Speed training, Adolescent

### Article Information

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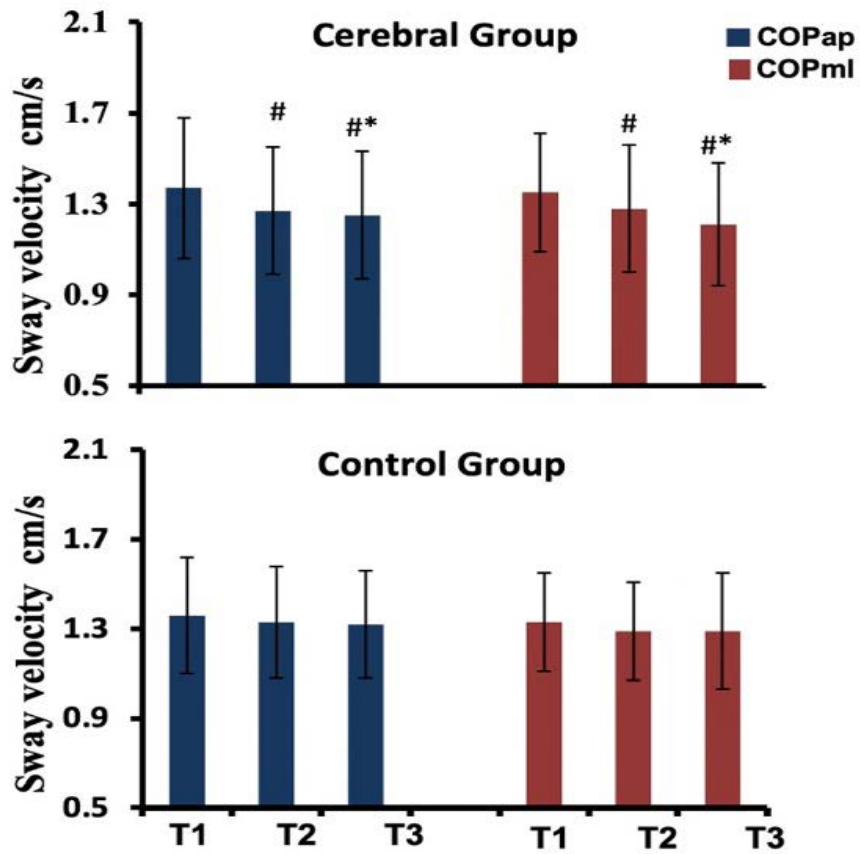
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**Figure 1.** Mean and standard deviation of sway velocity of center of pressure in anterior-posterior (COPap) and medial-lateral (COPml) directions and with without cognitive exercises, recorded before (T1), immediately after (T2) and 10 minutes after (T3) after cognitive exercises.