

A Comparative Study on Speed and Agility among Junior Male Badminton and Tennis Players of Kerala State

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Abstract

Speed is regarded as a fundamental motor talent and is important in many sports. To increase speed, one might employ a variety of training techniques. Quickness, agility, and speed are some of the most important and obvious components of sports success. The ability to move rapidly and gracefully around the court to position oneself for a shot is referred to as speed; excellent court movement requires agility. Badminton is a popular fast-paced indoor sport. To be successful in badminton you need excellent court speed and agility, with a good background of endurance. Tennis is a good sport for maintaining health, fitness, strength and agility. It also has social and psychological benefits. Speed in tennis can be how fast the ball is moving, or foot speed of the player, and even perhaps the RPMs that the ball spins while in flight.

The study was conducted on 35 junior male badminton and 35 junior male Tennis players of Kerala state. It is concluded that badminton players have good agility compare to Tennis players. And tennis Players have good speed compare to Badminton players. Tennis Players have to travel more distance to hit the ball so they need more speed than Badminton players. Badminton players have to move very short distance so they need less speed compare to tennis players.

Introduction

Speed is critical for sports performance and is the basis for sport selection. Sports performance requires one-dimensional power and the translation of that power into change-of-direction power for performance. These would appear to be very different skills, yet the training techniques are largely similar. Speed is regarded as a fundamental motor talent and is important in many sports. To increase speed, one might employ a variety of training techniques. Quickness, agility, and speed are some of the most important and obvious components of sports success. The ultimate goal of a program to develop speed, agility, and quickness is an improvement in the capacity to react fast, apply a lot of force rapidly in the proper direction, and redirect that force if required.

The ability to move rapidly and gracefully around the court to position oneself for a shot is referred to as speed; excellent court movement requires agility. It gives you the freedom to stand in the right place and gives you a stable surface on which to hit the ball. Players must change directions more than four times during a normal game, therefore agility is essential to being able to move quickly and position oneself to strike the ball.

In addition to requiring physical strength and power to accelerate and decelerate in diverse directions, agility also depends on balance and in tennis, a standard five-second point involves more than four indirections, thus agility—the capacity to change direction

swiftly and successfully—becomes an essential skill. Quick starts and stops give you more time to position yourself and get ready for the next ball. Because agility is linked to movement efficiency, it enables a player to conserve energy during a game.

The regulated capacity to quickly and precisely shift position and direction is referred to as agility. A response of a known type and in a known direction to an anticipated stimulus, and a reaction of an undermined type and in an unknown direction to a set of stimuli that may vary widely and thus be somewhat unpredictable, are the two conditions under which the performer's ability should be influenced diversely. The physical attribute that allows a person to quickly and precisely shift their body posture and direction is called agility. When it comes to competition and technique training, agility is crucial. The goal of skill training is to get the athlete closer to the optimal form for the movement sequence.

Rapid and accurate footwork is necessary to maneuver through narrow areas, swiftly change direction, and sustain stability while executing diverse maneuvers. Players possessing high agility are capable of executing maneuvers such as cutting, pivoting, and evading with fluidity and efficiency, allowing them to generate space and elude defenders. Players must fast accelerate to achieve maximum velocity and decelerate swiftly to come to a halt or alter their course. Agility enables players to effectively create and manage their speed, enabling them to quickly respond to game events.

Badminton is a popular fast-paced indoor sport. To be successful in Badminton, need excellent court speed and agility, with a good background of endurance. The fitness training for badminton should focus on speed, agility and endurance, with also strength and flexibility also important. Movements around the Badminton court are of very short distance, so movement speed training should focus of reaction time, acceleration and agility (change of direction). There are drills to increase foot speed, such as quick feet ladder drills. Training should also focus on strength and power development.

Tennis is a good sport for maintaining health, fitness, strength and agility. It also has social and psychological benefits. Speed in tennis can be how fast the ball is moving, or foot speed of the player, and even perhaps the RPMs that the ball spins while in flight. It can also be how quickly a player chooses to hit the ball - down to the split-second. Agility is an important ability for tennis players. To be successful in the rallies, players must perform rapid, multidirectional movements in response to the ball or the position of the opponent.

Methodology

The study was conducted on 35 junior male Badminton and 35 junior male Tennis players of Kerala state. The age varies between 17 to 19 years. To measure the speed 50 meter running was conducted and recorded the time by stopwatch with split second timer. And for agility 25 meter (4x 25 meter) shuttle run were conducted and time was recorded with the help of stopwatch with split second timer. Before administration the test all the participants were informed about the procedure and objectivity of the test.

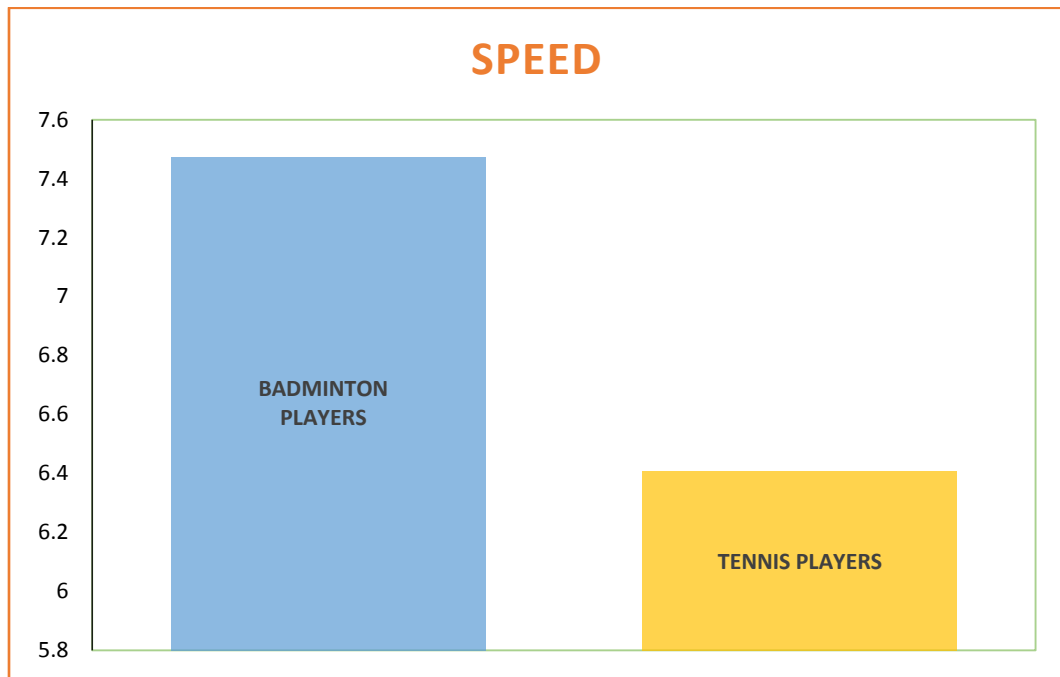
Result and Discussions

Table 1

Items	Subject	N	Mean	SD	Std error mean	t	df	Sig (2 tailed)
50 mts Run	Badminton Players	35	7.47	0.95	0.16	6.67	34	0.05
	Tennis Players	35	6.4	0.93	0.15			

Figure 1

The Speed test (50 meter Run test) of male tennis and male badminton players



In table 1 it is found that Tennis players have more speed compare to Badminton players. The average speed of Tennis players was 6.40 and were good in speed. The Badminton players have average speed of 7.47

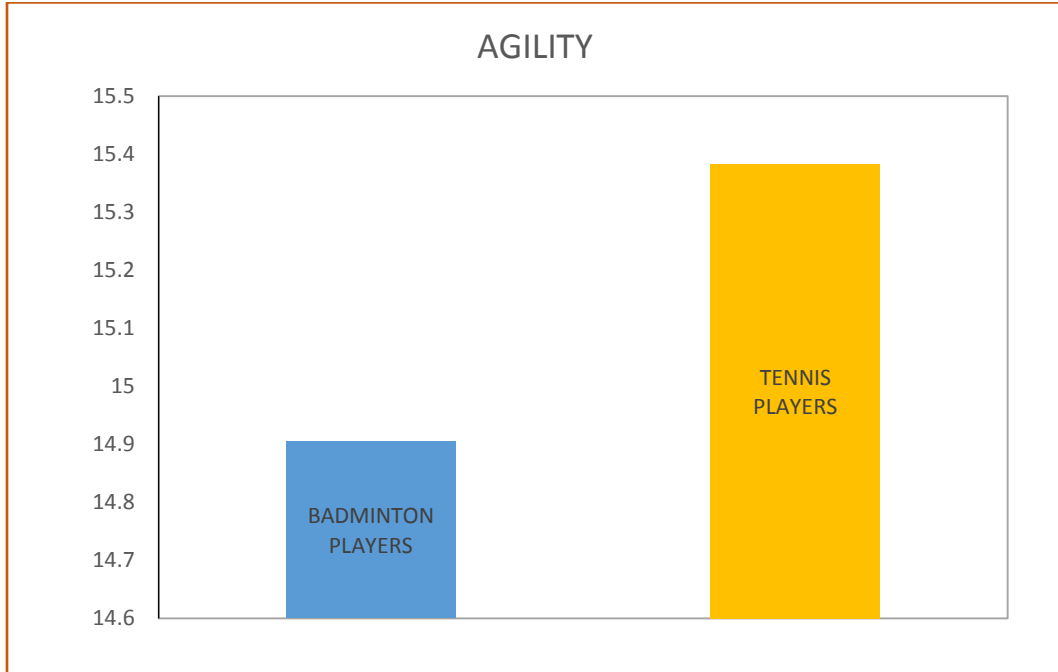
Table 2

Items	Subject	N	Mean	SD	Std error mean	t	df	Sig (2 tailed)
Shuttle Run	Badminton Players	35	14.90	1.80	0.30	0.29	34	0.05
	Tennis Players	35	15.35	1.57	0.26			

In table 2 it is found that the badminton player were more excellent in shuttle run because there is a rapid change of direction in every stroke. The average agility of badminton players was 14.90. They took minimum of time to change their direction. Compared to tennis players, their average agility was 15.38.

Figure 2

The Agility test (4x 25 meter shuttle run test) of male tennis and male badminton players



Conclusion

It is concluded that Badminton players have good agility compare to tennis players. And Tennis Players have good speed compare to Badminton players. Tennis Players have to travel more distance to hit the ball so they need more speed than badminton players. Badminton players have move very short distance so they need less speed compare to Tennis players. The agility of Badminton players were more because they have to change their direction quickly in short period of time to hit the shuttle which would move fast during the rally. The agility of tennis player were less compare to badminton players because they get more time to change their direction to hit the ball.

Recommendations

It is recommended that both Badminton and tennis player should have to undergo sports training to develop their performance. Systematic training to the development of motor fitness will improve the playing capacity and get more development in respective sport. Same type of study can be conducted on other motor fitness variable and also on other sporting events. Same type of study may be conducted in different sports and games and also in different motor fitness components.

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