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Assessment of Reaction Time and Agility of Male Badminton and Table Tennis Players of Inter Collegiate Level Tournaments, Manipur

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Abstract

The work was meant to determine the times of reaction and agility in male badminton and table tennis players by evaluating differences between players. 20 were badminton players and 20 were table tennis players were selected who had participated in inter collegiate level tournaments, Manipur at the age of ranged between 19 and 23 years. Descriptive statistics and Independent 't' test was engaged to each variables for equating them at 0.05 level of significance. The finding revealed that badminton players were better to coordinate the hand reaction time in lesser duration than table tennis players whereas agility exposed that table tennis players were better than badminton players since it took lesser time to react. Both reaction time and agility gave there were significant difference between badminton and table tennis players.

Key Words: Reaction time, Agility, Badminton, Table tennis.

1. Introduction

Between the indoor games, badminton and table tennis occupy a room of superiority equally for instance a single along with group sport. Systematic instructions besides advanced tactic have finished the game additional presentation concerned with than always earlier. Through the practical, strategic and preparation borders of the game, roughly added borders comprising of physical structures, rapid response and recurring actions have concentrated the game an active sport. Badminton and table tennis have in mutual a quick progression speed, resistance, strength, coordination, reaction, expectancy of game skills and technical achievement. Thus the study determines to find the reaction time and agility of male badminton and table tennis players at college level.

2. Methodology

2.1 Selection of subjects

40 male players were selected as subjects for the study. Out of 40 players 20 were Badminton Players and 20 were Table Tennis Players. All the subjects were selected who had participated in inter collegiate level tournaments, Manipur. In this study the age of subjects (Badminton and Table Tennis players) ranged between 19 and 23 years.

2.2 Design of the Study

To study the reaction time and agility a two group descriptive research design was employed.

2.3 Reliability of the Data

In this research study, the reliability of data was tested by determining the subject's consistency, instrument's consistency, the tester ability and consistency of tests. Entirely the normal approaches and appliances were used for data generation.

2.4 Reaction Time

The reaction time of the Badminton and Table Tennis players was determined by Nelson Hand Reaction Test and computing in seconds.

2.5 Agility

The agility of the Badminton and Table Tennis players was determined through T-test shuttle run (4x10m) and assessing in seconds.

2.6 Statistical Analysis of the Data and Significance Level

The data characteristics like Descriptive statistics and Independent 't' test was engaged to each variables for equating them. The level of significance selected was 0.05.

3. Results of Study

3.1 Reaction Time

3.1.1 Hand Reaction Time of Badminton and Table Tennis players

Table 1: Reaction Time of Badminton and Table Tennis players

Variables	Mean ± SD	MD	t-value

Badminton	10.55 ± 2.45	1.7	2.39
Table Tennis	12.25 ± 2.06		

*Significant at 0.05 level, $t_{(0.05)}$ (38) = 2.04

Above Table 1 presents results of the reaction time assessment of Badminton and Table Tennis players. This showed that reaction time of mean score of Table Tennis players (12.25) sec. were higher than mean score of Badminton players (10.55) sec. From the mean score it could be revealed that Badminton players were better to coordinate the hand reaction time in lesser duration than Table Tennis players. t-value of Badminton and Table Tennis players was 2.39 for significant 0.05 level. It meant that Badminton had better than Table Tennis players on reaction time at intercollegiate level.

3.2 Agility

3.2.1 Agility of Badminton and Table Tennis players

Table 2: Agility of Badminton and Table Tennis players

Variables	**Mean ± SD**	**MD**	**t-value**
Badminton	9.82 ± 0.54	1.05	4.77
Table Tennis	8.77 ± 0.8		

*Significant at 0.05 level, $t_{(0.05)}$ (38) = 2.04

Table 2 highlighted the outcomes of the agility assessment of Badminton and Table Tennis players displaying that agility of mean score of Badminton players (9.82) sec. were higher than mean score of Table Tennis players (8.77) sec. From the mean score of agility it could be exposed that Table Tennis players were better than Badminton players since it took lesser time to react. t-value of Badminton and Table Tennis players was 4.77 for significant 0.05 level on agility at intercollegiate level.

4. Discussion and Conclusion

In present study there are differences of hand reaction time between Badminton and Table Tennis players. Hand reaction time is faster in Badminton players than Table tennis players, which is statistically significant.

The conclusions that the players complicated in Table Tennis game were established to be in the progressive side in Agility related to the players expanded in Badminton game may be due to the fact that the game of Badminton is played in a relatively larger area than the game

of Table Tennis. Thus needs and progresses more Agility for rapid actions in addition to return to the initial position although casing the court in game.

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