



A COMPARATIVE STUDY OF SELECTED MOTOR FITNESS PARAMETERS BETWEEN FRONT AND BACK POSITION COLLEGE LEVEL MEN BALL BADMINTON PLAYERS

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ABSTRACT

The aim of the present study was to compare the selected motor fitness parameters between front and back position college level men ball badminton players. The subjects for this study were confined from SRM Group of Institutions, Kattankulathur, Tamil Nadu, and India. The subject's ages ranged from 18 to 25 years. Each group consists of 15 players (front and back). This study was conducted only for men college level players and the motor fitness parameters such as reaction time, agility, balance was selected for this study. The mean (M) and the standard deviation (SD) of the collected data were computed. To find out the significance of the difference between the two means the 't' ratio was determined. The level of significance was fixed at a 0.05 level of confidence.

KEYWORDS

Ball Badminton, front position, back position, motor fitness, agility, balance, reaction time.

INTRODUCTION

Ball badminton is a racket game like badminton but the ball is made up of woolen and looks like a tennis ball, it originated from Thanjavur, Tamil Nadu India. The team consists of five main players' likely three front row players and two back row players. Agility has been defined as the ability to maintain a controlled body position and rapidly change direction without a loss of balance, body control, or speed. Balance is described as the ability to maintain an upright position. The term "postural stability" describes balance more specifically as the ability of an individual to maintain their center of gravity within a base of support. Reaction time is a talent that often goes unnoticed in sports. It simply means how fast an athlete is able to respond to stimulus. The ball badminton players may be required more reaction time, agility, and balancing abilities to become better performers. The findings of the study would be significant in the following ways, in this study may be helpful for physical education teachers, coaches, and trainers to identify the importance of motor fitness and performance for front and back position ball badminton players. It will be useful to understand to make specific changes that take place in different variables and different attitudes.

METHODOLOGY

The purpose of the study was to compare the selected motor fitness parameters between the front row and back row players college level ball badminton players. It was hypothesized that there may be any significance between front and back position players as selected motor fitness parameters. The players were selected from SRM Group of Institutions, Kattankulathur, Tamil Nadu, India. Each group consists of 15 players. Their age ranged from 18 to 25 years. This study was conducted for only men players. Certain factors like rational habits, lifestyle, diet, and climatic conditions were not taken into account in the study. The players engaged themselves in their respective games and the effect of these activities on their playing ability was not controlled. The player's body type was not taken into consideration.

Table I - Type of variables, test and unit of measurements

S.No.	Variables	Test / Equipment	Unit of Measurements
1.	Reaction time	Hand eye reaction test	Milliseconds
2.	Balance	Flamingo balance test	Counts
3.	Agility	Shuttle run	Seconds

Statistical Technique

The mean (M) and the standard deviation (SD) of the collected data were computed. To find out the significance of the difference between the two means, the 't' ratio was determined. The level of significance was fixed at a 0.05 level of confidence.

Results of the Study

Table II-Comparison of hand - eye reaction time between front position and back position players

Sl.No.	Name of the Group	Mean	S.D	S.E	Mean Difference	't' ratio
1.	Front	3.43	47.20	19.74	3.57	1.81*
2.	Back	3.07	52.39			

*Significant at 0.05 level of confidence. The required table value at the

0.05 level is 1.761 for 14 degrees of freedom.

Table III-Comparison of balance between front position and back position players

Sl.No.	Name of the Group	Mean	S.D	S.E	Mean Difference	't' ratio
1.	Front	3.33	2.22	0.816	1.00	1.22
2.	Back	4.33	2.09			

*Significant at 0.05 level of confidence. The required table value at the 0.05 level is 1.761 for 14 degrees of freedom.

Table IV-Comparison of agility between front position and back position players

Sl.No.	Name of the Group	Mean	S.D	S.E	Mean Difference	't' ratio
1.	Front	9.54	0.96	0.30	0.17	0.56
2.	Back	9.71	0.52			

*Significant at 0.05 level of confidence. The required table value at the 0.05 level is 1.761 for 14 degrees of freedom.

DISCUSSION ON FINDINGS

The findings of this study suggested that through the back position players play and practice in the larger area during the game situation and training periods. Table – II shows there will be a considerable amount of difference in reaction time. It may show significant differences in the performance of the defensive skill. Table – III & IV shows no significant differences in balance and agility between front and back players. The 't' ratio obtained was tested for significance at a 0.05 level of confidence. The analysis of the data revealed that there is a significant difference only in hand-eye reaction time. The statistical results revealed that the selected motor fitness, the 't' value obtained was found to be significant for the back players compared to the front players.

CONCLUSION

This study concluded that the back position players have more agility compared to front position players but it's not at a significant level. The balance of both position players has the same it's also not significant. Only the hand-eye reaction time is significantly different. The back position players have a fast reaction compared to front position players.

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