

Comparison of Speed and Endurance of Table Tennis Players and Badminton Players in School Students

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Abstract

The study was under taken with the intension of comparing selected physical fitness variables in Badminton Players and Table Tennis Players. The variables selected were endurance and speed. 60 male school students were selected as subjects aging 14 year to 16 year who were actively involved in their respective games. Among these 30 belonged to Badminton game and rest 30 belonged to Table Tennis game. Descriptive Statistics and Independent 't' test were employed using SPSS-19 Software. Findings suggest that the players belonging to Badminton game were in higher side of endurance, whereas in speed both group end up with similar results.

KEYWORDS: Endurance, Speed, School Students, Badminton Players, Table Tennis Players

Introduction

The study of growth and development of childhood and adolescence are one of the important areas in education as well as physical education. So, physical education teachers and professionals must be acquainted with the nature of development of different motor skills in childhood and adolescent due to participating in different type of activities.

Human body is a gift by nature. Life in the present time is not less than the blessing of God. Scientific discoveries have changed the entire face of our world. It has changed the thorny life into the bed of roses. Good health provides sound and solid foundation on which fitness rests and at the same time fitness provides one of the most important key to health and living one's life to fullest. The negative effects of degraded physical fitness on both the individual and society are serious and multi-dimensional. It can cause many risk factors to health including coronary heart disease, certain forms of cancer, hypertension, respiratory problems, and each associated with increases in all cause mortality (Cataldo 1999). Low levels of physical activity and cardio-respiratory fitness are both associated with higher risk of all cause and disease specific mortality (Thune et al. 1998).

Schools have the potential to improve the health of young people by providing instruction in physical education that promotes enjoyable lifelong physical activity. Diseases and health problem resulting from an inactive lifestyle have their origins early in life. This is when an active life style should be established. Fitness begins at birth and should continue throughout a person's life. Fitness improves general health and it is essential for full and vigorous living. The physically fit child feels more alert and eager to do things. A weak child is a weak brick in the wall of the country. The wealth of a country depends entirely upon the health of every citizen of the country.

The complex nature of physical fitness can be best understood in terms of its components such as cardiovascular endurance, strength, flexibility, speed, agility and muscular endurance. In addition to these components of physical fitness there are many other factors which contribute to physical fitness including heredity, living standard, nutrition, hygienic conditions, environmental and climate factors etc. (Sallis. et.al. 1992).

The purpose of this study was to compare the tribal school going active female students belonging to hilly area and tribal school going active female students belonging to plain area so as to find out which of these two categories is more physically fit in response to tests administered.

Methodology

Subjects: For this study total of 60 male school students were selected as subjects aging 14 year to 16 year who were actively involved in their respective games. Among these 30 belonged to Badminton game and rest 30 belonged to Table Tennis game from Guwahati, Assam.

Variables selected and criterion measures:

- 600 yard run/walk(548.64 mts.) for cardio-vascular endurance (minutes).
- 50 yard(45.72 mts.) dash for speed (seconds).

Statistical Technique: Descriptive statistics and Independent ‘t’ test was employed to each variables for comparing them. The level of significance chosen was 0.05. SPSS 19 was used to execute the statistical functions.

Results

After converting the raw data into group data, statistical test were employed to find out necessary information. The results and findings of the same are given in the tables and illustrations below.

Table 1: Descriptive Test Scores of Speed and Endurance of Badminton Players and Table Tennis Players in School Going Students

Groups		No. of subjects	Mean	Std. Deviation	Std. Error Mean
Endurance	Badminton	30	2.10	0.31	0.06
	Table Tennis	30	2.28	0.32	0.06
Speed	Badminton	30	7.89	0.98	0.18
	Table Tennis	30	8.14	0.73	0.13

Table: 1 shows the nature and characteristics of fitness scores of speed and endurance of badminton players and table tennis players in school going students (i.e. number of subjects in each group, mean, standard deviation and standard error of mean).

Table 2: Comparative Analysis of Speed and Endurance of Badminton Players and Table Tennis Players in School Going Students

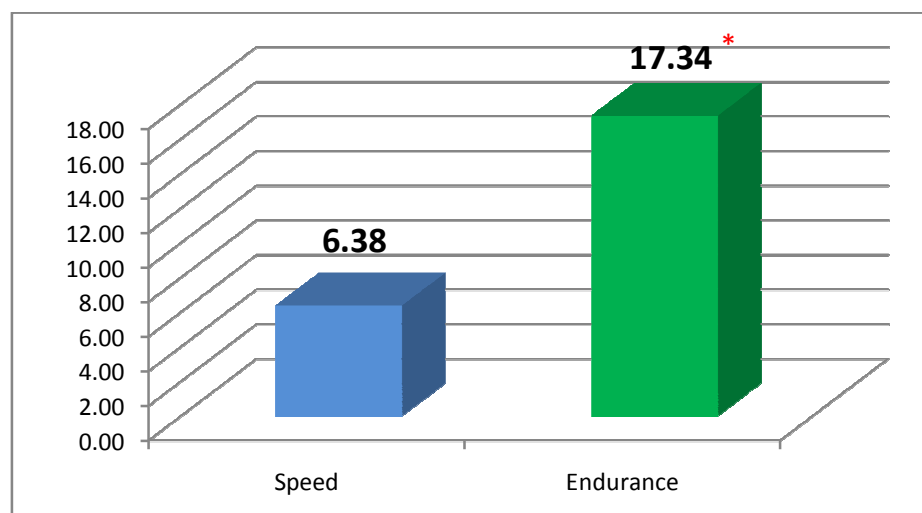
Test Items	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F-Value	P-Value	t-value	P-Value	Percentage Mean Difference	Std. Error Difference
Endurance	0.487	0.49	2.45*	0.03	17.34	0.08
Speed	2.611	0.11	1.39	0.27	6.38	0.22

*significant, 't' .05 (58) =2.000

The scrutiny of table 2 reveals that there lies a statistically significant difference between endurance of badminton players and table tennis players in school going students (t-value = 2.45, p= 0.03). Whereas no statistically significant difference lies between speed of badminton players and table tennis players in school going students (t-value = 1.39, p= 0.27).

Levene's Test for equality of variances results shows that the variance of two groups were equal in all the fitness variables as p value of all the variables were more than .05 thus two sample t-ratio's assumption is fulfilled.

Figure 1: Percentage Difference of Speed and Endurance of Badminton Players and Table Tennis Players in School Going Students



* Significant at 0.05 level

The above figure is the graphical representation of the percentage difference of various fitness variables in two different groups.

Conclusion The conclusion which can be drawn on the basis of the present study is the players belonging to Badminton game were in higher side of endurance than the players belonging to Table Tennis game, however both the lots were found to be same in speed.

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