



**COMPARATIVE STUDY ON PHYSICAL FITNESS
COMPONENTS BETWEEN BENGALI AND
RAJBANGSI COLLEGE STUDENTS**

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ABSTRACT

In the present study, an attempt has been made to compare physical fitness components namely speed, strength, endurance, agility, flexibility and sit-ups. The main purpose of the study was to measure the motor fitness levels of physical education students and measure the difference of the students to find out the status of physical education students in the district of Cooch-Bihar under West-Bengal. Present study was conducted to observe the Physical fitness status Rajbanshi and Bengali college students. The subjects of the present study were taken from Cooch-Bihar College, Dinhata college and Tufangang college Physical Education students. Total seventy students were selected as subject (both male and female) for the present study. Age were ranged between 18 to 22 years. The subjects were principally of two categories i.e. general Bengali students and Rajbanshi students. AAHPER Youth Fitness Test (AYFT) was taken for the measuring physical fitness components like speed, agility, explosive leg strength, hand and shoulder strength, abdominal muscle strength, cardio vascular endurance etc. To collect information for the present study following tools are used as measuring tape, cone and marker for field marking, pull up or chin up bar for hand and shoulder strength, whistle for signal, stopwatch for time, score sheet for data collection. The tests was tested to the AAHPERD youth physical test manual. He concluded that the urban school boys had better performance in Pull-ups and Bent knee sit-ups than rural school boys. He also observed that in case 50 meter dash for speed and SBJ for explosive and strength straddle chin is quite better than General students. In the case of 10x4 meter shuttle run, pull up, sit up for Bengali students is better than Rajbanshi students.

Key Words: Physical Fitness. Rajbanshi. Bengali. AYFT.

1. INTRODUCTION

Concept of physical fitness is as old as humankind. Through out the history of mankind physical fitness has been considered an essential element of every day life. The ancient people were mainly dependent upon their individual strength, vigor and vitality for physical survival. This involved mastery of some basic skill like strength, speed, endurance, agility for running, jumping, climbing and other skills employed in hunting for their livings. Overall the physical illness and the tendency to deteriorate have in increased all ages, casts, and racial/ethnic groups especially adults (**Ichinohe et al. 2004**). 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, diabetes, hypertension, stroke, gall bladder diseases, osteoarthritis, respiratory problems, gout and is associated with increases in all cause mortality (**Cataldo 1999**). In adults, relationship among physical activity, health related fitness, and health are fairly well established (**Boucherd and Shepherd 1994**). 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**).

Physical fitness is a state of health and well-being and, more specifically, the ability to perform aspects of sports, occupations and daily activities. Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise, and sufficient rest. The expert committee of the World Health Organization (1981) described physical fitness as “the ability to undertake muscular work satisfactorily.” Physical fitness is the capacity to early out, reasonably well, various forms of physical activities, without being unduly tired and includes qualities important to the individual’s health and well-being (**Baskar & Pavithra 2017**)

The purpose of this study was to compare the Rajbanshi and Bengali college going students and to find out which of these two categories is more physically fit in response to tests administered so as one can improve the standard and level of physical fitness in Rajbanshi and Bengali college going students in the district of Cooch-Bihar (West-Bengal).

The significant of the study to identify the status of physical education students of Cooch-Bihar and identify the motor fitness levels of physical education students and to identify the difference of the students.

2. METHODOLOGY

2.1 Selection of Subject

The subjects of the present study were taken from Cooch-Bihar College, Dinhata college and Tufangang college Physical Education students. Total seventy students were selected as subject (male =47 and female=23) for the present study. Age were ranged between 18 to 22 years. The subjects were principally of two categories i.e. general Bengali students and Rajbanshi students. Simple random samples have been taken to do this study.

2.2 Test Used

AAHPERD test was taken for the measuring physical fitness components like speed, agility, explosive leg strength, hand and shoulder strength, abdominal muscle strength, cardio vascular endurance etc.

2.3 Collection of Data

To collect information for the present study following tools are used as measuring tape, cone and marker for field marking, pull up or chin up bar for hand and shoulder strength, whistle for signal, stopwatch for time, score sheet for data collection. The tests was tested to the AAHPERD youth physical test manual (1976).

2.4 Measured Components of Physical Fitness

AAHPERD test was taken for the measuring physical fitness components like speed, agility, explosive leg strength, hand and shoulder strength, abdominal muscle strength, cardio vascular endurance etc. To collect information for the present study following tools are used as measuring tape, cone and marker for field marking, pull up or chin up bar for hand and shoulder strength, whistle for signal, stopwatch for time, score sheet for data collection. The tests were tested to the AAHPERD youth physical test manual.

2.5 Statistical Analysis

The arithmetic mean, standard Deviation, and t-Test of each variable were calculated for statistical calculations. Excel Spreadsheets of windows version 7 was used.

3. RESULT AND DISCUSSION

TABLE 1
NUMBER OF SUBJECTS COLLECTED FROM DIFFERENT COLLEGES

Sl no	Name of the colleges	Number of students		Total
1	Cooch Behar College	Male	17	26
		Female	9	
2	Dinhata College	Male	18	28
		Female	10	
3	Tufanganj College	Male	12	16
		Female	4	
Total numbers of students				70

TABLE 2
T-TEST OF AAHPER YOUTH FITNESS COMPONENTS BETWEEN RAJBANSHI AND BENGALI MALE STUDENTS.

Component	Mean \pm SD		t- value	Level of significance
	Rajbanshi	Bengali		
Speed	7.50 \pm .88	7.38 \pm .69	.69	Not significant
Agility	10.6 \pm .86	10.45 \pm .63	.51	Not significant
Explosive strength	2.12 \pm .21	2.20 \pm .22	.22	Not significant
Shoulder strength	11.93 \pm 4.46	10.18 \pm 3.86	1.63	Not significant
Abdominal strength	32.83 \pm 7.94	32 \pm 7.55	7.09	Significant*
Cardiovascular endurance	1.924 \pm .36	1.93 \pm .45	.98	Not significant

* Significant at 0.05 level

Table 2 shows the mean + SD value of the respective fitness components amongst Bengali male and Rajbanshi male Physical Education students. It was observed that in case 50 meter dash for speed and SBJ for explosive strength is quite better than Rajbanshi students. The t value was found to be .62 and .22 is not significant at .05 level.

In this study we observed that the mean performance of Rajbanshi male students in all fitness aspects was better than Bengali speaking students but the differences were not significant at 0.05 level. and significant difference found only in abdominal strength. In a study conducted by Chan Basha, S. & Reddy, P. C. (2003) it was concluded that the rural school boys showed better performance in 50 yards dash, shuttle run, standing broad jump and 600 yard run than urban school boys. They also clearly concluded that the urban school boys had better performance in Pull-ups and Bent knee sit-ups than rural school boys. The result of our study is partially similar to the above study.

In the case of 10x4 meter shuttle run, pull up, sit up Bengali students is better than Rajbanshi students The t value was found to be .51 and .22 is not significant at .05 level

TABLE 3
T-TEST OF AAHPERD YOUTH FITNESS COMPONENTS BETWEEN RAJBANSHI AND BENGALI FEMALE STUDENTS.

Component	Mean ± SD		t- value	Level of significance
	Rajbanshi	Bengali		
Speed	9.0±1.18	9.23±.90	.54	Not significant
Agility	12.52±1.25	12.3±1.23	.93	Not significant
Explosive strength	1.68±.20	1.54±.22	.15	Not significant
Shoulder strength	14.41±4.15	10.08±4.96	.68	Not significant
Abdominal strength	20.58±9.92	24.1±6.84	.01	Not significant
Cardiovascular endurance	2.53± .57	3.12± 0.76	.06	Not significant

Insignificant at 0.05 level

Table 3 shows the mean ± SD value of the respective fitness components amongst Bengali males and Rajbanshi male Physical Education students. It was observed that in case 50 meter dash for speed and SBJ for explosive and strength straddle chin is quite better than General students. In the case of 10x4 meter shuttle run, pull up, sit up for Bengali students is better than Rajbanshi students.

In present study Bengali and Rajbanshi female students showed more or less same performance so far as testing of fitness components were concerned. No significant differences found between the two categories of subjects while performing AYFT.

Deb, P. and Dhara, S.C. (2020) concluded that Tribal students are the most vulnerable section in our society, they receives less nutrition, due to their forest dwelling practices and other daily earning activities, they are facing hard livelihood, moreover they had poor access to different state and central government facilities that are announced time to time. Non-tribal populations of rural areas are also facing the same problems. Poor socioeconomic status and illiteracy are the contributing factors for under nutrition and poor health status. In a study conducted on physical fitness of tribal and non-tribal high school students it was found that the tribal students were superior in terms of explosive strength than the non-tribal boys and girls; better flexibility was reported in non-tribal boys and girls; tribal boys showed better dynamic flexibility than non-tribal boys; better endurance was found in non-tribal boys than the tribal boys; non-tribal girls showed lower endurance and speed in comparison to tribal girls (**Devi, 2000**). In another study conducted by **Dhara et al (1995)** showed that tribal boys had significantly higher physical efficiency compared to non-tribal students of 14 to 17 years. Our study is very much relevant to this findings.

4. CONCLUSION

The ethnically one, Rajbanshi group, one of the most tolerant indigenous people of strategically located areas in whole of North Bengal(barring its hilly terrains); in a sizable portion of Assam; western part of Meghalaya; Purnia, Kishanganj districts and eastern part of Katihar district of Bihar; Jhapa, Morang and Sunsari districts of Nepal; Rangpur, East Dinajpur districts and some parts of north west Mymensingh, northern Rajshahi and Bogra districts of Bangladesh and lower parts of Bhutan where these indigenous people ordinarily reside from time immemorial. They are victims of identity crisis, domination by mainstream people and division of their homelands. Today they form majority population in rural areas as they have been displaced

from urban areas. Since their mother tongue is officially not recognized, on record they have been identified by the mainstream language of the state.

In North Bengal, majority of Rajbanshi people like to remain as Shatriya and they have a great respect to the great social reformer Roy Saheb Thakur Panchanan Barma. Since, these people were majority in population i.e. almost 70% to 80% prior to gaining Independence in 1947 and still in majority in rural North Bengal, they should be given a share in state governance. Acute poverty and lack of education are the drawbacks to these hapless people.

It was observed from the results that abdominal strength has only shows significant variations in case of Bengali male and Rajbangsi male. However AAPHERD youth fitness components is dependent on the motor fitness components. May be the subjects of all the group i.e. Bengali and Rajbansi community were of physical education students so as per the curriculum schedule and nature of activity they engaged therefore most of the parameters give insignificant results. However study on large scale involving more subjects can open up a new area of status of fitness components which can be recorded as demographical and ethnical value.

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