



## Health related fitness status of female involved in regular bratachari fitness maneuvers

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### Abstract

Bratachari is a traditional artistic feat of Bengal. It is a well-designed formal activity synthesized with songs and rhythmic activities. Bratachari was introduced as a combined Indian folk form of songs and dances. According to fitness experts Bratachari is supposed to have wide range of wellness benefits on human health. Bratachari. Keeping in view the health and fitness benefits of the indigenous activity Bratachari was considered as an integral part of Physical Education curriculum. The scholar being passionate for the activity made up his mind to conduct a research study on the topic health related fitness status of Women Bratachari practitioner. For the study 30 girls were randomly selected as the subjects of the present study from Bratachari training centers of North and South 24 parghanas of west Bengal who are regularly involved in Bratachari training. Initially the scholar collected personal data like age height and weight of the girls. In the physical fitness parameter only health related fitness variables such as Cardio respiratory endurance, Muscular strength, Muscular endurance, Flexibility and body composition were taken into consideration. For analysis of data descriptive statistics was computed and the mean scores were compared with standard norms. From the comparison it is clear that the cardiovascular endurance, and muscular endurance of Bratachari girls was "ABOVE AVERAGE". Flexibility of the girls was EXCELLENT, muscular strength of Bratachari girls was "AVERAGE and condition of the body fat percentage was within the athletic category.

**Keywords:** bratachari, health related fitness

### Introduction

India is rich with its cultural heritage. It has numerous indigenous sport as well as cultural activities. There are different dance forms enriching the people with art culture and aesthetics. There are also different folk dances as well as cultural activities having beneficial effects on human health. The traditional folk activities are basis of a countries cultural heritage. The activities not only play positive role in fitness and wellness of individual they also act as catalyst in the process of socialization. They develop a bridge between different groups of people. The wave of globalization and cultural evolution are leading to degeneration of cultural heritage. It is the time to restore the traditional culture of our country to save the identity of human race or ethnicity.



Fig 1

The scholar being passionate for the activity made up his mind to conduct a research study on the topic health related fitness status of Women Bratachari practitioner. For the study 30 girls were randomly selected as the

subjects of the present study from Bratachari training centers of North and South 24 parghanas of west Bengal who are regularly involved in Bratachari training.

### Purpose of the study

The key purpose of the study was to access the health related fitness status of Women Bratachari practitioners.

### Methodology

Basically the prime objective of the scholar was to ascertain the health related fitness status of girls who regularly take part in Bratachari Feats. Based on the objective it falls under the category of status study.

For the study 30 girls were randomly selected as the subjects of the present study from Bratachari training centers of North and South 24 parghanas of West Bengal.

It is worth mentioning that the mean scores of the subjects were compared with age specific AAHPERD fitness norms.

**The criterion measures are as follows:**

#### Personal data

**Table 1**

Variables	Unit of measurement
Age	Years
Height	Centimeters
Weight	Kilograms

#### Physical fitness variables

**Table 2**

Variable	Test for assessment	Unit of measurement
Cardio respiratory endurance	Queens College step test	ml/kg/min
Muscular endurance	Sit ups	Nos./min
Muscular strength	Hand gripe dynamometer test	Kgs.
Flexibility	Sit and rich test	Cms.
Body composition	Skin fold measurement	mm.

### Result and Discussion

In this part of the paper the author tried to present the data and their related interpretation and discussion.

**Table 3:** Descriptive Statistics of Personal data of the subjects

variables	N	Mean	Std. Deviation
Age	30	13.67	1.709
Height	30	146.83	4.928
Weight	30	39.483	6.6274

From table-3 it is clear that the mean of the age, height and weight of the Bratachari girls are 13.67 years, 146.83 cm and 39.483 kg and their SD are 1.709 years, 4.928 cm and 6.627 kg respectively.

Accordingly descriptive statistics of health related fitness variables of the subjects were computed which are presented in the table below.

**Table 4:** Descriptive Statistics of Health Related Fitness Variables of the subjects

Variables	No of Subjects	Mean	SD
Cardiovascular endurance	30	145.60	±61.0
Abdominal Muscular endurance	30	21.8	±8.18
Flexibility	30	21.23	±5.22
Arm strength	30	29.40	±6.88
Body Fat %	30	13.33	±2.56

From the table-4 it is clear that the mean and SD value of cardio vascular endurance was 145.60 and 61.0 respectively. Abdominal Muscular Endurance was 21.8±8.18 numbers per min. of the subjects, Flexibility was 21.23±5.22cm, Arm strength was 29.40 ±6.88 and Body Fat % was 13.33 ±2.56 respectively.

**Table 5:** Norms of Cardiovascular endurance, Muscular endurance and muscular strength of the Girls

Category	Cardiovascular endurance	Muscular endurance	Muscular strength
Excellent	<129	>25	>36
Above Average	158-129	21-25	31-36
Average	166-159	15-20	25-30
Below Average	170-167	9-14	19-24
Poor	>170	<9	<19

According to the result and comparison with standard norms it is clear that the mean value of the cardiovascular endurance of Bratachari girls was 145.60 and it belongs to the "ABOVE AVERAGE" category. As per the result of the Muscular Endurance with comparison of standard norms it is clear that the Bratachari girls belong to "ABOVE AVERAGE" category. According to the results and comparison with standard norms it appears that the condition of the muscular strength of Bratachari girls belong to "AVERAGE" category.

**Table 6** Standard Norms of Flexibility of the Girls

Category	Cm	Inches
Super	>+30	>+11.5
Excellent	+21 to +30	+8.0 to +11.5
Good	+11 to +20	+4.5 to +7.5
Average	+01 to +10	+0.5 to +4.0
Fair	-07 to 00	-2.5 to 00
Poor	-15 to -8	-6.0 to -3.0
Very poor	<-15	<-6.0

According to the result and comparison with standard norms it is clear that the condition of the Flexibility of Bratachari girls is EXCELLENT"

**Table 7:** Standard Norms of Body Fat Percentage of girls

Category	Women
Essential	10-12%
Athletic	13-20%
Fit	21-24%
Acceptable	25-31%
Obese	>32%

According to the result and comparison with standard norms it is clear that the condition of the body fat percentage of Bratachari girls is athletic.

### Conclusions

Within the limitations of the present investigation following conclusions were drawn on the basis of the obtained results

1. With respect to cardiovascular endurance the status of the Bratachari girls is "ABOVE AVERAGE".
2. With respect to muscular endurance the condition of the Bratachari girls is "ABOVE AVERAGE".
3. On the basis of Flexibility the status of the Bratachari girls is EXCELLENT".
4. Based on standard norms the condition of muscular strength of Bratachari girls is "AVERAGE"
5. According to the results and comparison with standard norms it is clear that the condition of the body fat percentage of Bratachari girls is athletic.

### Recommendations

On the basis of conclusions drawn the following recommendations were proposed for futures studied:

1. Similar studies may be conducted with men Bratachari practitioners.
2. Studies may be conducted with experimental and control groups.
3. Study may be conducted with different age groups.
4. Studies may be conducted with larger number of samples.

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