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Physiological parameters response to the Influence of traditional Badaga dance on school students

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Abstract: This study was designed to investigate the influence of traditional badaga dance on physiological parameters of school students. To achieve the purpose of the study 30 school students were selected from The Nilgiris district. The subjects was randomly assigned to two equal groups (n=15). Group- I underwent traditional badaga dance (TBDG) and group - II was acted as control group (CG). The traditional badaga dance was given to the experimental group for 3 days per week (Monday, Wednesday and Friday) for the period of eight weeks. The control group was not given any sort of training except their regular routine work. The physiological parameters vital capacity (tested by wet spirometer) and resting pulse rate (tested at radial pulse) were assessed before and after the training period. The data collected from the subjects were statistically analyzed using't' test to find out whether significant mean difference existed at 0.05 level of confidence. The result of vital capacity and resting pulse rate speculated significant improvement due to traditional badaga dance with the limitations of diet, climate, life style status and previous training. The results of the present study are in confirmatory with the findings of. Thus it is concluded that traditional Badaga dance significantly improves vital capacity and resting pulse rate of school students.

Key Words: Traditional Badaga dance, vital capacity and resting pulse rate

1 Introduction

In spite of the mushrooming of gyms and fitness centres as well as the rising reputation of fitness apps and virtual gyms, most Indians do not find time to exercise. In a pan-India study conducted by Gympik, India's largest fitness discovery platform, 53% of the defendants said that they lack the discipline to stay fit. The innovations in science and technology similarly extracts the time of man there by authorizing less time to take care of health and fitness. If health and fitness maintenance itself a hypothetical situation, space for recreation or leisure time pursuit is a dream.

Indian Status on Activity Levels

A study conducted by Ranjith M Anjana et al., (2014) on Physical activity and inactivity patterns in India found out that a large percentage of people in India are inactive with fewer than 10% engaging in recreational physical activity [1]. Researchers surveyed 14,227 individuals in three states - Tamil Nadu, Maharashtra and Jharkhand and the Union territory of Chandigarh - which have a combined population of 213 million. They found that 54.4% of the population was physically inactive.

Novelty of This Research

This age of super parenting keeps the school goers always in a rush to complete a target. They are busy completing home works at home, and busy learning and writing at school. They in fact lead a sedentary life. Thus the researcher the first generation learner from the badaga community was curious in bringing out the school book worms from the shell; by providing badaga dance as an activity which will rule out boredom as well as engage them physically.

Badaga Dance

Badaga dance is almost elegance and style. It plays a important role in all events, festivals and even in the passing funeral of the badaga community. 'Badagas' the fun loving cluster does not vacillate to step out and dance though any celebration. From a small kid to a hundred year old person have finds happiness in performing the ritual badaga dance. There are four types of badaga dances Mettatta, Bombaratta, Kholatta and Vindhamoratta.

The researchers has registered that whenever they get an opportunity to perform for a badaga song or beat, they rejoice it and they could sense the change in body and mind. They feel fresh. They have also realized the mood changes and feel like fully recharged. The researcher has also expressed that

TABLE - 1

COMPUTATION OF 't' RATIO ON SELECTED PHYSIOLOGICAL PARAMETERS OF SCHOOL BOYS ON EXPERIMENTAL GROUP AND CONTROL GROUP

Group	Test		Mean	N	Std. Deviation	Std. Error Mean	T ratio
EXPERIMENTAL GROUP	Vital capacity *(In ml)*	Pre test	4.17	15	0.33	0.06	6.05*
		Post test	4.56	15	0.26		
	Resting pulse rate *(By Counts)*	Pre test	72.93	15	0.96	0.35	8.56*
		Post test	69.86	15	1.55		
CONTROL GROUP	Vital capacity *(In ml)*	Pre test	4.28	15	0.23	0.02	1.00
		Post test	4.31	15	0.29		
	Resting pulse rate *(By Counts)*	Pre test	72.86	15	2.06	0.29	0.45
		Post test	73.00	15	2.23		

***significant level 0.05 level (Degrees of Freedom,1 and 14; Table Value 2.14)**

this was the reason for the curiosity to scientifically analyse the effect of thier own traditional heritage the baduga dance on the selected parameters of school going tribal students of the Nilgiris district – the queen of hill stations.

Methodology

Experimental Approach to The Problem

To achieve the purpose of the study 30 school boys were selected by random sampling technique from the Nilgiris district. The subjects were randomly assigned into two groups namely, Traditional Badaga dance Group (TBDG) (n=15) and Control Group (CG) (n=15). Badaga dance training was given to the experimental group as 3 days per weeks (on alternate days) for the training period of eight weeks. The control group was not given any sort of training except their routine.

Research Design

Pre-post Quasi experimental design was employed in this study. The evaluated physiological parameters were vital capacity was assessed by wet spirometer and the unit of measurement was in millilitres, resting pulse rate were assessed by radial pulse the unit of measurement was in counts. The parameters were measured at baseline after eight weeks of traditional badaga dance were examined.
The intensity was increased once in two weeks based on the variation of the beat and song.

Training Programme

The training programme was scheduled for 45 minutes for one session in a day, 3 days in a week for a period of eight weeks duration. These 45 minutes included warm up for 5 minutes, 35 minutes badaga dance sandwiched by 5 minutes of warm up and 5 minutes of warmed 5minutes warm down.

Statistical Analysis

The data collected before and after training period of eight weeks on the above said variables due to the effect of baduga dance was statistically analyzed using 't' test to find out the significant mean difference between pre and post test. In all cases the criterion for statistical significance was set at 0.05 level of confidence. ($P < 0.05$)

Table 1 reveals the computation of mean, standard deviation and 't' ratio on selected physical and physiological parameters namely vital capacity and resting pulse rate of experimental group. The obtained 't' ratio on vital capacity and resting pulse rate were 6.05 and 8.56 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level of significance. Since the obtained't' values were greater than the table value it was found to be statistically significant.

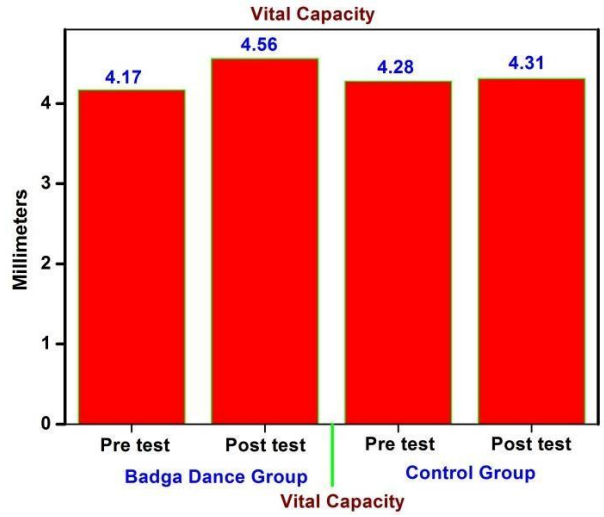

Figure – 1 Bar diagram showing the mean value on Vital Capacity of school boys.

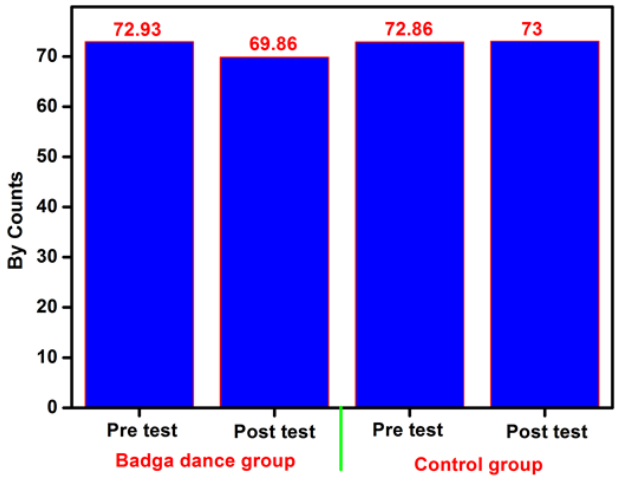

Figure – 2 Bar diagram showing the mean value on Resting Pulse Rate of school boys.

Further the computation of mean, standard deviation and 't' ratio on selected physical and physiological parameters, namely vital capacity and resting pulse rate of control group. The obtained't' ratio on vital capacity and resting pulse rate were 1.00 and 0.45 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level of significance. Since the obtained 't' values were lesser than the table value it was found to be statistically not significant.

Discussion and Findings

The present study assays the impact of eight weeks traditional badaga dance on the selected physiological parameters of the school boys. The results indicated that traditional badaga dance is not only enjoyable but also an effective training to bring out desirable changes on vital capacity and resting pulse rate among school boys . Similar study conducted by Gulam Mohmad Dar (2017) concluded that the aerobic and pranayama exercise programs for school, college students can be best designed to delay the onset of fatigue and improve the mechanical efficiency of Lung and heart [2]. Mukesh et al (2015) concluded that the six weeks aerobic training is responsible for the improvement of selected physiological variables like Resting Heart Rate (RHR), Vital Capacity (VC) [3]. Murugavel et al (2014) the effect of the aerobic dance programme on resting heart rate was positive in the sense there was a decrease in the resting heart rate and increase in the breath holding time, cardio respiratory endurance and Vo2 max [4]. The results of this research which studied the effects of aerobic dance on physiological variables indicate an identical change.

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Conclusions

1. It was concluded that eight weeks traditional badaga dance significantly improved the vital capacity and resting pulse rate of school students.
2. Traditional badaga dance is one among the most appropriate means to bring about the desirable changes over physiological variables of school students.
3. Hence, suggested that coaches and the physical education teachers dealing with students can incorporate traditional badaga dance as a component in their physical education programme.

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