



Effects of Selected Yogic Practices on Cardio Vascular Endurance among State Level Cricket Players

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Received 02nd January 2021, Accepted 1st February 2021

Abstract

The purpose of the study was to find out the effects of selected yogic practices on cardio vascular endurance among state level cricket players. To achieve this purpose a sample of 40 state level cricket players were selected at random from Chennai from the age group of 19 - 22 years. They were divided into four equal groups. Experimental Group – I - Yogasanas group, Experimental Group – II -Pranayamas group and Experimental Group – III - Combined (Yogasanas and pranayama practices) the pre test was conducted to all the four groups in measured through 12 minutes run and walk for Cardio vascular endurance. The Yogasanas group, Pranayamas group and Combined (Yogasanas and pranayama practices) was given to the experimental groups and for the period of 6 weeks for five days per week. The training load was fixed based on pilot study, but the control group was not given any type of training. After 6 weeks of training the post test was taken from all the subjects. The pre and post test was conducted for cardio vascular endurance at the end of each session and data was recorded. Analysis of covariance was used to test of significance. The results of the study reveals that the efficiency of the cardio vascular endurance improved significantly ($p>0.05$).

Keywords: Asana, Pranayama, Cardio-vascular endurance.

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Introduction

Cricket is basically a bat and ball game and it is one of the oldest sports in the world. The expansion of the British Empire spread this once colonial recreational sport into a spirited game to all corners. Today cricket seems to be a virtual lifeline of many commonwealth nations. Cricket is a game in which each team has to bowl and bat according to certain rules and regulations. A team which scores greater number of runs will be the winner. In olden days, the game was played in different names in different countries. The game of Cricket is developed from a simple game of hitting an object with a piece of wood. Basically it is the battle between bat and the ball, but the approach has changed from time to time. Cricket is played in many forms such as Test, One day International, First class Twenty 20, Super Six, Eight- a- side, Indoor Cricket Max Cricket, Double wicket and Single wicket.

The game of Cricket is passing through an exciting period of change and development that is making coaches to re-evaluate the coaching methods, techniques and tactics. Sports performance is a complex mixture of genetics make –up and environmental influences like training etcetera. Performance in Cricket

is determined by several factors namely skill, technique, tactics, fitness, training etcetera. Both physical and mental fitness play vital role in performance (Sisodiya et.al, 2005).

Humans are like a lamp that has five lampshades over a light. Each of the lampshades is a different color and density. As a light shines through the lampshades, it is progressively changed in color and nature. It is a bitter – sweet coloring. On the other hand, the shades provide the individualized beauty of each lamp. Yet, the lampshades also obscure the pure light. The Yoga path of Self – realization is one of progressively moving inward, through each of those lampshades, so as to experience the purity at the eternal center of consciousness, while at the same time allowing that purity to animate through our individuality. These five levels are called koshas, which literally means sheaths.

Kosha means sheath, like the lampshades covering the light, or like the series of wooden dolls pictured below. Maya means appearance, as if something appears to be one way, but is really another. Advaita Vedanta suggests that you imagine a dark night in which you think you see a man, only to find that it was an old fence post that was hard to see at first; that is maya.

Here, it means that each of the sheaths or koshas is only an appearances. In truth, all of the levels,

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layers, koshas, or sheaths of our reality is only appearance, or maya (while also very real in the sense of dealing with the external world), and that underneath all of those appearances, we are pure, divine, eternal consciousness, or whatever name you prefer to call it. This is one of the fundamental principles of Advaita Vedanta meditation.

Statement of the problem

The purpose of the study was to find out the effects of selected yogic practices on cardio vascular endurance among state level cricket players.

Review of Related Literature

Esteghamati, et al. (2008) reviewed that sedentary life style is considered as a main risk factor for DM-II. The role of regular exercise is appreciated in both primary prevention and treatment. Diabetic people can benefit from physical activity in order to have a better control on blood glucose level, lipid profile, body weight, and blood pressure. Furthermore, psychological improvements may follow such as decreasing anxiety or depression and improvement of sleep quality. Different kinds of training including aerobic, resistive and flexibility exercises could be recommended, but some parameters like intensity, duration, and frequency of exercises as well as safety measures should be explained to the patient when prescribing an exercise program. A thorough medical evaluation is required before starting an unaccustomed exercise program in order to modify it, as needed. It is recommended that diabetic people participate in moderate aerobic (40-60% VO₂max) and resistive (30-50% 1RM) exercises 3-5 and 2-3 sessions per week, respectively. However, it is a general recommendation, and an expert in exercise therapy should tailor the program with respect to individual

conditions.

Methods and Materials

The sample for the present study consists of 60 state level cricket players from Chennai. The subjects were selected using random sampling method. Their age ranged from 17 - 22 years. They were divided into four groups namely Experimental group I , II, III and control group (n=60), and 12 minutes run and walk for cardio vascular endurance was administered to them. The Yogasanas group, Pranayamas group and Combined (Yogasanas and pranayama practices) was given to the experimental groups for the period of 6 weeks both morning at 6.30 to 7.30 for the period of 6 weeks . The training programme was administered for sixty minutes per session. The control group did not engage in any special activities. The load was fixed based on the pilot study. The pre test and post test were taken before and after the experimental training programme. The test was conducted 12 minutes run and walk for cardio vascular endurance on each end of the cessations and data was recorded. Analysis of covariance was used as a test of significance.

Group I: Experimental Group – I – (Asana Practices)

Group II: Experimental Group – II – (Pranayama Practices)

Group III: Experimental Group – III – (Asana with Pranayama Practices)

Group IV: Control Group (No Practice)

Results

The data pertaining to the variables under the study was examined by analysis of covariance for each criterion variables separately in order to determine the differences, if any between the groups at different stages.

Table 1. Computation of analysis of covariance of pre-test, post-test and adjusted post-test on cardio vascular endurance of yogasanas , pranayamas and combined practices (Total Scores in meters)

| | EX.GR. | EX.GR. | EX.GR. | Control | Source of Variance | Sum of Squares | df | Mean Squares | Obtained F |
|-------------------------|---------|---------|---------|---------|--------------------|----------------|-------|--------------|------------|
| Pre Test Mean | 2134.00 | 2236.33 | 2115.00 | 2128.33 | between | 140357.92 | 3.00 | 46785.97 | 1.85 |
| | | | | | within | 1418866.67 | 56.00 | 25336.90 | |
| Post Test Mean | 2310.33 | 2348.00 | 2566.67 | 2070.67 | between | 1857414.58 | 3.00 | 619138.19 | 24.42* |
| | | | | | within | 1419990.00 | 56.00 | 25356.96 | |
| Adjusted Post Test Mean | 2307.77 | 2358.97 | 2561.59 | 2067.35 | between | 1857002.49 | 3.00 | 619000.83 | 24.40* |
| | | | | | within | 1395169.11 | 55.00 | 25366.71 | |
| Mean Diff | 176.33 | 111.67 | 451.67 | 57.67 | | | | | |

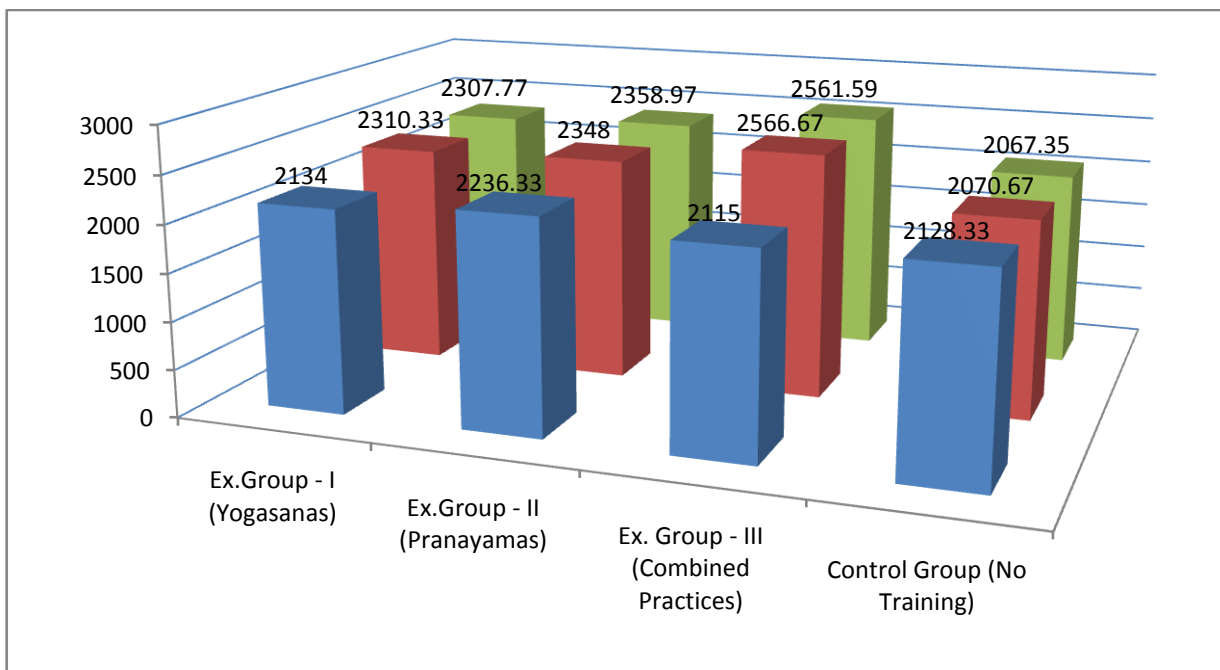
Table value at 0.05 level of confidence for 3 and 56 (df) is 2.77, 3 and 55(df) is 2.77 .

* Significant at 0.05 level.

Table 2. Scheffe’s post-hoc test for cardio vascular endurance

| Control Group | Experimental Group – I (Yogasanas) | Experimental Group – II (Pranayamas) | Experimental Group – III (Combined) | Mean Difference | Post Hoc |
|---------------|-------------------------------------|---------------------------------------|-------------------------------------|-----------------|----------|
| 2067.35 | 2307.77 | | | 240.42 | 167.95 |
| 2067.35 | | 2358.97 | | 291.62 | |
| 2067.35 | | | 2561.59 | 494.24 | |
| | 2307.77 | 2358.97 | | 51.20 | |
| | 2307.77 | | 2561.59 | 253.82 | |
| | | 2358.97 | 2561.59 | 202.62 | |

Figure 1. Bar diagram showing pre and post-test values of experimental group i, ii, iii & control group on cardio vascular endurance



RESULTS AND DISCUSSIONS ON THE FINDINGS OF CARDIO VASCULAR ENDURANCE

Taking into consideration of the pretest means and posttest means adjusted posttest means were determined and analysis of covariance was done and the obtained F value 24.40 was greater than the required value of 3.22. And hence it was accepted that the Yogasanas group, Pranayamas group and Combined (Yogasanas and pranayama practices) significantly improved the wellbeing of state level cricket players of the state level cricket players .

The data pertaining to the variables under the study was examined by analysis of covariance for each criterion variables separately in order to determine the differences, if any between the groups at different stages.

CONCLUSIONS

It was observed that the pre-test results, it was noticed that there was no significant differences between control and experimental groups. While the post test results of control and experimental groups had been analyzed statistically and revealed that, there was a significant mean difference in favor of experimental groups.

In the analysis of co-variance the cardio vascular endurance among control and experimental groups, a significant difference was seen and which source light on the applicable effect of six weeks of yogic practices. From the statistical analysis it is clear that both training programmes had its own the combined groups (asana & pranayama) showed more effects in cardio vascular endurance when compared to asana and

pranayama group.

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