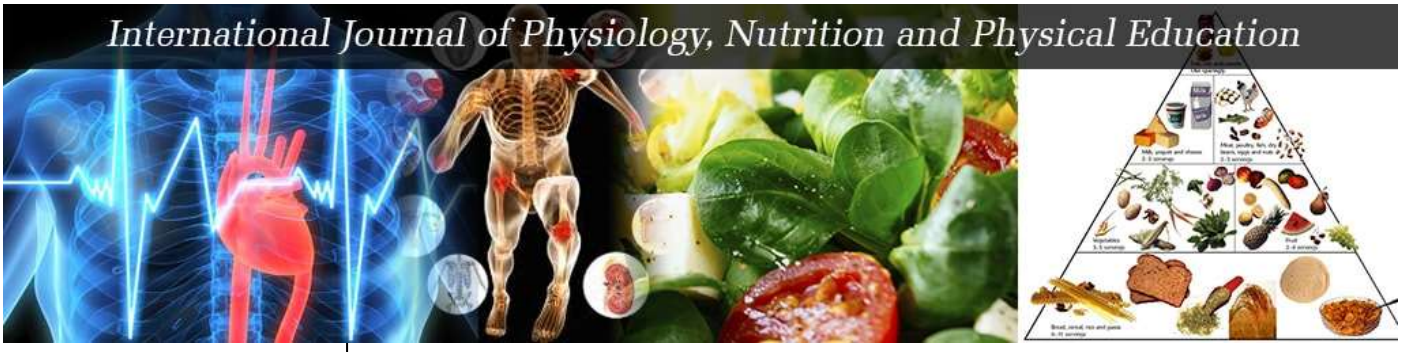

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Impact of aerobic exercises and yogic practices on flexibility and anxiety among male cricket player

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Abstract
The purpose of present study was to find out the impact of aerobic exercises and yogic practices on flexibility and anxiety among male cricket players. To achieve this purpose, forty five cricket players, studying in various colleges and departments from Dhanalakshmi Srinivasan educational institutions, Perambalur, Tamil Nadu, India were selected as subjects. They have participated in the intercollegiate tournaments for their respective, affiliated universities intercollegiate cricket tournaments. Their age ranged from 18 to 25 years. The selected forty five subjects were randomly divided into three groups of fifteen each, out of which group-I (n = 15) underwent aerobic exercise (continuous running) for three days (alternative days) per week, group-II (n = 15) underwent yogic practice for five days per week (Monday to Saturday) for twelve weeks and group-III (n = 15) remained as control. Prior to and after the training period the subjects were tested for, flexibility and anxiety. Flexibility was measured by using sit and reach test and anxiety assessed by using Taylor manifest scale questionnaire. The statistical tool were used for the present study is Analysis of covariance (ANCOVA). If obtained 'F' ratio is significant, Scheffe's test used as a post hoc test to find out the differences among the groups. The result of the study was a significant altered on flexibility and anxiety after twelve weeks of aerobic exercises and yogic practices. However the different was favour of experimental groups. There was no significant difference was occurred between aerobic exercises and yogic practices group after twelve weeks of aerobic exercises and yogic practices.

Keywords: Aerobic exercises, yogic practices, cricket, flexibility and anxiety

Introduction
Exercise that involves breathing in oxygen can help prevent cardiovascular diseases including high blood pressure, type 2 diabetes, arthritis, and stroke. Exercises with a high impact, such as weight training, brisk walking, and running, can prevent osteoporosis. No of how one may feel about their relationship to certain diseases, engaging in oxygen-consuming exercise will assist to prevent them. Exercises that are dynamic or intense also ensure the durable framework. It burns calories, making it the main activity that specifically contributes to increased fat quotients.

Exercise that has little to no effect, such as aerobic or cardio exercise, relies heavily on the process of developing heart power (Plowman and Smith, 2011) [5].

Yoga is not a quaint myth buried in ignorance. In a stupor, it is the best number of valuable. That is both an essential demand for today and a tradition for the future. It's a talent for responsible living and, as implied, might be a useful addition to daily life. It affects every aspect of a person's personality, including their will, mind, arousal, physicality, intuition, and religion (Satyananda Saraswati, 1999) [8].

The bat-and-ball sport of cricket is played between two teams of eleven players each on a field with a pitch of 22 yards (20 metres) in the middle and wickets at either end made up of two bails balanced on three stumps. When a fielding team member known as the bowler "bowls" (propels) the ball from one end of the pitch towards the wicket at the other end of the field, a "over" is considered to have been successfully completed. The batting side has one player at each end of the pitch, with the player at the opposite end of the pitch from the bowler aiming to strike the ball with a bat. The batting side scores runs when either the bowler unfairly bowls the ball to the batter, the ball reaches the boundary of the field, or the two batters swap ends of the pitch, which results in one run.

The fielding side's aim is to prevent run-scoring and dismiss each batter (so they are "out", and are said to have "lost their wicket"). Means of dismissal include being bowled, when the bowled ball hits the stumps and dislodges the bails, and by the fielding side either catching a hit ball before it touches the ground, or hitting a wicket with the ball before a batter can cross the crease line in front of the wicket to complete a run.

Statement of the Problem

The purpose of present study was to find out the impact of aerobic exercises and yogic practices on flexibility and anxiety among male cricket players.

Methodology

To achieve this purpose, forty five cricket players, studying in various colleges and departments from Dhanalakshmi srinivasan educational institutions, Perambalur, Tamil Nadu, India were selected as subjects. They have participated in the intercollegiate tournaments for their respective, affiliated universities intercollegiate cricket tournaments. Their age ranged from 18 to 25 years. The selected forty five subjects were randomly divided into three groups of fifteen each, out of which group-I (n=15) underwent aerobic exercise (continuous running) for three days (alternative days) per week, group-II (n=15) underwent yogic practice for five days per week (Monday to Saturday) for twelve weeks and group – III (n=15) remained as control. Prior to and after the training period the subjects were tested for, flexibility and anxiety. Flexibility was measured by using sit and reach test and anxiety assessed by using Taylor manifest scale questionnaire.

Analysis of Data

The data collected prior to and after the experimental periods flexibility and anxiety on aerobic exercises and yogic practices and control group were analyzed and presented in the following table–1

Table 1: Analysis of covariance of aerobic exercises and yogic practices and control groups

Variable Name	Group Name	Aerobic Exercises	Yogic Practices	Control Group	F ratio
Flexibility	Pre-test Mean ± S.D	7.78 ± 0.83	7.71 ± 0.73	7.78 ± 0.76	0.363
	Post-test Mean ± S.D.	10.05 ± 0.93	10.25 ± 0.85	7.75 ± 0.73	10.58*
	Adj.Post-test Mean ± S.D.	10.038	10.232	7.77	45.23*
Anxiety	Pre-test Mean ± S.D	17.58 ± 1.41	17.08 ± 1.31	17.02 ± 1.28	0.717
	Post-test Mean ± S.D.	15.05 ± 1.34	14.95 ± 1.32	17.02 ± 1.28	11.38*
	Adj.Post-test Mean ± S.D.	14.981	14.965	17.023	44.10*

Significant at .05 level of confidence

* (The table value required for significance at .05 level of confidence with df 2 and 42 and 2 and 41 were 3.22 and 3.23 respectively.)

Results

From the Table-I it is clear that aerobic exercises and yogic practices improve flexibility and anxiety when compare with control group.

Further to determine which of the paired means has a significant improvement, Scheffĕ *S* test was applied as post-hoc test. The result of the follow-up test is presented in Table-II.

Table 2: Scheffĕ S Test for the Difference between the Adjusted Post-Test Mean of flexibility and anxiety on aerobic exercises and yogic practices and control group

Aerobic Exercises	Yogic Practices	Control Group	Mean Difference	Confidence interval at .05 level
Adjusted Post-test Mean of flexibility				
10.038		7.77	2.268*	1.106
10.038	10.232		0.194	
	10.232	7.77	2.462*	
Adjusted Post-test Mean of anxiety				
14.981		17.023	2.032*	1.236
14.981	14.965		0.016	
	14.965	17.023	2.058*	

* Significant at 0.05 level of confidence.

Both aerobic exercises and yogic practices improve flexibility and anxiety when compare with control.

Conclusions

From the analysis of the data, the following conclusions were drawn.

It was found from the effects of the training that flexibility has shown improvement for the aerobic exercises group and yogic practices group when compared with the control group. Milanovic *et al*., (2015) [4] likewise found that the moderate soccer preparing and aerobic exercises had improved flexibility. Jay Polsgrove *et al*., (2016) [6] proposed that the yoga practices has improved the flexibility level among school competitors. Tran *et al*., (2001) [9] established that there was maximum enhancement in flexibility due to the hatha yoga practices. In addition, the results of the tests shows that there was no significant difference between experimental groups.

Anxiety was decreased after the aerobic exercises and yogic practices programmes when compared with the control group. Rocha *et al*., (2012) [7] established that there was critical decrease in anxiety after the yogic practices programme. Ahmadi *et al*., (2013) [1] found that there was critical decline in anxiety after the aerobic and yoga training. Kwok *et al*., (2017) [3] has recommended from his research work that there was a high improvement in anxiety after the yoga versus stretching and resistance training exercises. There was no significant difference which happened between the training groups after their respective training programmes on anxiety.

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