



Enhancing Pace Bowling Skill in Cricket through Yogic Practice

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Abstract

Selected Yogic practices was applied as training method on experimental group of male students with a control group of equal number for a period of three months for training significance on cricket pace bowling skill. The status of the skill was measured through teacher made skill test before and after the training period. The obtained pre and post scores were analyzed through Analysis of covariance (ANCOVA) for statistical significance. Scheffe's Post hoc-test was applied to find out the better group among the two. The statistical significance detected on yogic practices group 47.8000 over the control group 37.0500 reveals a significant difference between the scores of pre and post treatment. The significant difference of yogic group over control group was due to the designed yogic practices undergone by the yoga group (Group-A) for a period of three months. The result proves that the designed yogic practices package has made a significant impact on the pace bowling skill in cricket of the yoga group compared to the other group.

Keywords: Yogic Practices, Pace Bowling..

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Introduction

Today the game of cricket is widely played in three formats. The test match, 50 over's one day International and twenty twenty. The cricket game is a high energy team sport. It is attractive at the same time very agile. Performance in cricket is determined by several factors namely skill, technique, fitness, and training. Yogic practice is an Indian method of exercise which is practiced over thousands of years for keeping the human body physically and mentally fit. Many research studies of the past reports that yogic training improves the physical fitness level as well as performance of sports person in various sports. Yogic practice plays an influential role in physical, physiological, psychological variables and performance in sports. In sports, training is generally understood to be synonym of doing exercise. In a narrow sense training is physical exercise for the improvement of performance. Training involves constructing an exercise programme to develop an athlete for a particular event. Many studies have reported that physical exercises would improve physical, physiological, psychological and performance parameters in most of the sports.

Methodology

To achieve the purpose of this study, thirty two college cricket players of Urumu Dhanalakshmi college affiliated to Bharathidasan University were randomly

selected as subjects. Their age ranges from 17 to 20 years. The selected subjects (N=32) were divided into two equal groups and named Group-I as yogic practice group, Group-II as control group. Thus each group consisted of sixteen subjects. Subjects in the Group-I underwent the yogic practice, subjects in the Group-II went off of from any specific yogic (or) physical exercises other than their regular practices. During the training period, training was given for experimental group. The yogic practice was given for twelve weeks, five days per week of 45 minutes each day in the morning session under the supervision of the investigator.

The data collected through skill test before and after the experimental treatment was analyzed by ANACOVA. Scheffe's test was followed as a post hoc test to determine the level of significant difference between the paired means. All of the statistical analysis, test were computed at 0.05 level of significance.

Pace bowling in cricket

Test: Pace bowling skill in cricket / Teacher made

Purpose: To measure the pace bowling performance

Field Markings

Different zones are marked on the cricket pitch and specific measurements of each zone are as follows. The parallel lines are marked from the wicket 1.5 feet away from the centre of the wicket on each side. This is extended up to half of the pitch. Three lines parallel to the popping crease towards the half way of the pitch 1

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meter, 2 meter, 3 meter and 5 meter away from the popping crease and connecting the two parallel lines in right angles to make zones. The zones represent full toss and over pitch, good length, short of length and short pitch areas of the ball pitching with in the 3 feet parallel lines. Another pair of parallel lines was marked right angles to the popping crease in the good length zones with 9 inches width in line with the wickets. Points were marked on various zones as shown in the figure.

Each subject **was** allowed to bowl 12 fair pace deliveries to measure their fast bowling skill ability. One point **was** awarded according to the zones the ball is pitching. Scores of each subject is noted for the 12 fair deliveries. No balls were not counted and the subject gets one extra ball for no ball. Scoring: The ball pitches on the full toss and over pitch zone carries 1 point, the ball pitches on the good length within the 9 inch zone carries 5 points, the ball pitches other than 9 inches zone in the good length area carries 4 points. Short of good length zone carries 3 points and short pitch zone carries 2 points, the ball pitches in other places will get zero point.

The maximum possible score is 60 points. The criterion of test such as objectivity, reliability, validity were established by test and retest method in the pilot study where the accuracy and exactness of the test and the test scores were obtained through a set of experimental subjects with the field experts before it was put to actual use.

Result of pace bowling performance

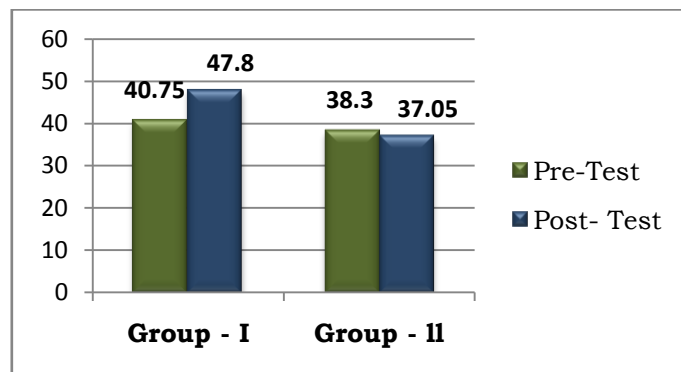
The data of Pace bowling performance was measured in scores obtained in the test before and after the twelve weeks of training of the control group (Group – II) and the two experimental group (Group – I). The data were analyzed and the results are presented in the Table – I. The graphical representation of the comparison pre and post test means and result of post-hoc test of the two groups is presented in the figures 1.a and 1.b respectively.

Table 1
Analysis of Co-variance of Pre, Post and Adjusted post test on Pace Bowling Performance of Experimental and Control Groups

Group means			Sum of squares	Df	MSs	F-ratio	Sign
Test	Group II	Group I					
Pre test	38.3000	40.7500	BM:60.433	2	30.217	0.8045	0.435
			WG:2038.150	57	35.757		
Post test	37.0500	47.8000	BM :1240.633	2	620.317	20.159	0.000
			WG :1753.950	57	30.771		
Adj-post test	37.0500	47.8000	BS:1240.633	2	620.316	22.676	0.000
			WS:1531.920	56	27.355		

BM: Between Means WG: Within Groups BS: Between Sets WS: Within Sets

Figure 1
Bar diagram representing pre test and post test means of Pace Bowling Performance



Employing Analysis of variance (ANOVA) the table shows that the pre-test mean pace bowling performance of the two groups namely control group (Group-II) and Yoga group (Group-I) did not differ significantly. The post-test mean pace bowling performance of the two groups differs significantly ($P <$

0.01). The adjusted post-test for mean pace bowling performance of the two groups done by Analysis of Covariance (ANCOVA) showed that the mean pace bowling performance differed significantly among the two groups ($P < 0.001$).

Figure II

Bar Diagram representing comparison of adjusted post test means of Pace Bowling Performance

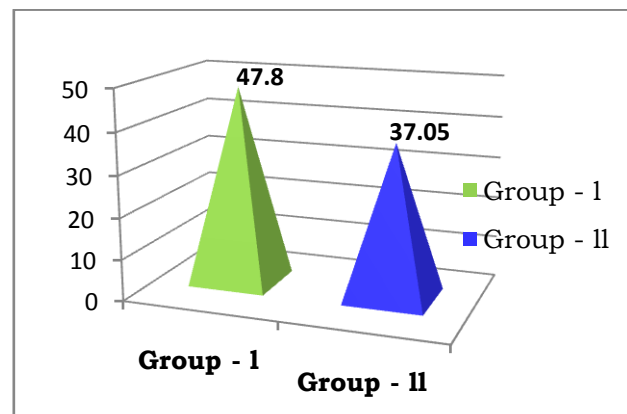


Table 2

Scheffe's post-hoc test of Pace Bowling Performance

Group	N	Subset for Alpha = 0.05	
		1	2
Group-II	20		37.0500
Group-I	20	47.8000	
Significance		.229	1.000

The result of the Scheffe's post-hoc test showed that the mean Pace bowling performance of the Yoga group (Group – I) is significantly higher than those of the other group (47.8000).

Conclusions

From the analysis of the data, the following conclusion is drawn that the cricket players of the yogic practices group had shown statistical significance in the pace bowling skill when compared to control group.

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