International Journal of Yogic, Human Movement and Sports Sciences 2019; 4(1): 739-741



ISSN: 2456-4419 Impact Factor: (RJIF): 5.18 Yoga 2019; 4(1): 739-741 © 2019 Yoga www.theyogicjournal.com Received: 17-11-2018 Accepted: 18-12-2018

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Effect of yogic practices and physical exercise on performance variables among male cricket players

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Abstract

The purpose of the study was to find out the effects of yoga practice and physical exercise on performance among male cricket players. To achieve the purpose of this study, forty eight college cricket players studying in various colleges affiliated to Bharathidasan University were randomly selected as subjects. Their age ranged from seventeen to twenty years. The selected subjects (N=48) were divided into three equal groups and named Group-I as yogic practice group, Group-II as physical exercises group and Group-III as control group each group consisting of sixteen subjects. Subjects in the Group-I underwent the yogic practice, subject in the Group-II underwent the physical exercises and subjects in the Group-III did not go through any specific yogic (or) physical exercise but their regular practice. During the training period, training was given for both experimental groups, the yogic practice and physical exercises were given for twelve weeks, five days per week for forty five minutes each day in the morning session under the supervision of the investigator. The performance variables namely playing ability. The performance of each cricketer was subjectively rated by the three qualified coaches in a ten point scale. The data was collected before and after the experimental treatment. Analysis of covariance (ANCOVA) was used to analyse the collected data. 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 analyses were computed at 0.05 level of significance. Yogic practice and physical exercises groups had shown significant changes in speed and agility when compared to control group among male cricket players. Physical exercise group are better than yogic practice on speed and agility among male cricket players.

Keywords: Yoga, physical exercise, speed and agility

Introduction

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. Opined that training is a programme of exercise designed to improve the skills and increase the energy capacity of an athlete for a particular event.

Yoga is a complete system of physical, mental, social and spiritual development. For generations, this philosophy was passed on from the master-teacher to the student. The first written records of the practice of yoga appeared around 200 B.C. in yogasutra of Patanjali. The system consisted of the eightfold path or Asthangayoga (Manikandan, & Sethu, 2017) [3].

To develop various skills in cricket among players certain specific yogic practice can be of great help for a greater performance and general fitness. Yoga is skill in action and a practical philosophy that aims at uniting the body, mind and spirit for health and fulfillment. It is a methodological effort towards self-perfection. It helps in expanding the limits of our consciousness and gain mastery over mind. Yoga as such provides a complete philosophy for living for it, comprises techniques that act as our mind and emotions.

Purpose of the study

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Methodology

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practice and physical exercises were given for twelve weeks, five days per week for forty five minutes each day in the morning session under the supervision of the investigator.

The performance variables namely playing ability. The performance of each cricketer was subjectively rated by the three qualified coaches in a ten point scale. The data was collected before and after the experimental treatment. Analysis of covariance (ANCOVA) was used to analyze the collected data. 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 analyses were computed at 0.05 level of significance.

Analysis of the data

Table 1: Analysis of covariance of pre, post and adjusted posttest means of yogic practice, physical exercises and control groups on performance

Test	Yogic practice group	Physical exercises group	Control group	SOV	SS	df	MS	F-ratio		
Pre test										
Mean	Mean	4.80	4.81	4.76	B.M.	0.01	2	0.02		
SD(±)	SD(±)	0.60	0.58	0.56	W.G.	15.50	45			
Post test										
Mean	Mean	5.93	5.21	4.65	B.M.	13.18	2	16.78*		
SD(±)	SD(±)	0.88	0.40	0.47	W.G.	17.7	45			
Adjusted post test										
Mean	Mean	5.93	5.21	4.64	B.S.	13.21	2	16.78*		

SOV – Source of variance

 $SS-Sum\ of\ square$

df – degrees of freedom W.G. – Within groups

MS – Mean square B.S. – Between sets B.M. –Between mean

The table I shows that the obtained 'F' ratio 0.02 for pre-test means was less than the table value, 3.20 for df 2 and 45 required for significance at 0.05 level of confidence on performance. The obtained 'F' ratio 16.78 for post-test means was greater than the table value 3.20 for df 2 and 45 required for significance at 0.05 level of confidence on performance. The obtained 'F' ratio of 16.46 for adjusted post-test means

was greater than the table value of 3.21 for df 2 and 44 required for significance at 0.05 level of confidence on performance. The results of the study indicated that there was a significant difference among the adjusted post-test means of yogic practice, physical exercises and control groups on performance.

Table 2: The scheffe's post hoc test for the difference between paired means of yogic practice, physical exercises and control groups on performance

Yogic practice group	Physical exercises group	Controlgroup	MD	CI
5.93	5.21	-	0.72*	
5.93	-	4.64	1.29*	0.50
-	5.21	4.64	0.57*	0.30

^{*}Significant at 0.05 level of confidence.

The table II shows that that the mean difference values between yogic practice group and physical exercises group, yogic practice group and control group and physical exercises group and control group are 0.72, 1.29 and 0.57 respectively which are greater than the confidence interval value 0.50 at 0.05 level of confidence. The results of the study showed that there were a significant difference between yogic practice

group and physical exercises group, yogic practice group and control group and physical exercises group and control group on performance.

The results of the study showed that the yogic practice group is better than physical exercise on performance among male cricket players.

W.S. – Within set

^{*}Significant at 0.05 level of confidence. (The table values required for significance at 0.05 level of confidence for 2 & 45 and 2 & 44 are 3.20 and 3.21 respectively).

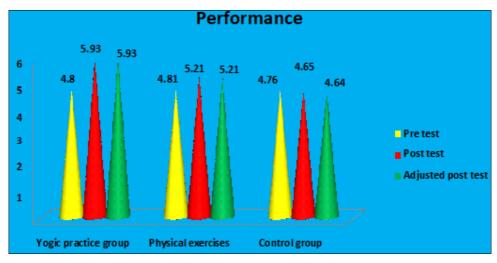


Fig 1: The pre, post and adjusted mean values of yogic practice, physical exercises and control groups on performance.

Discussion on Findings

The results of the study indicated that the experimental group's namely yogic practice and physical exercises had a significant influence on performance among male college cricket players. Also yoga practices group are better than physical exercise on performance among male cricket players. The findings of the present study were supported by many research findings Sethu (2016a) [6], Rajkumar (2007) [4], Balaji (2008) [1], Manickam (2009) [2], Sisodiya, *et al.* (2005) [7] and Sethu, (2016) [5].

Conclusions

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

- 1. The cricket players of the yogic practice and physical exercises groups had shown significant changes in performance when compared to control group among male cricket players.
- The group yogic practice was better than the physical exercise group on performance among male college cricket players.
- 3. The control group had not shown significant change on performance among male college cricket players.

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