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## Effect Of Combined Ballistic Training And Yogic Practices On Psychomotor Profiles Among College Men Cricket Players

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### ABSTRACT

The purpose of the study was to find out the effect of combined ballistic training and yogic practices on psychomotor profiles among college men cricket players. To achieve the purpose of the study thirty cricket players have been randomly selected from PSG college of arts & science, coimbatore, Tamil Nadu and India. The age of the subjects were ranged from 18 to 25 years. The selected subjects were divided into two groups with fifteen subjects in each group. The experimental group underwent a combined ballistic training and yogic practices programme for six weeks. The control group was not participating in any other training during the course of the study. Reaction time was taken as criterion variable in this research. The selected subjects were tested on reaction time was measured through Stick drop method (Distance on ruler 20 centimeters). To determine whether there had been a significant improvement, the dependent't' test was used to analyse the data, and an ANCOVA was used to see whether there had been any significant differences between the groups. To examine the level of significance difference, if any, across groups, the.05 level of confidence was fixed. The difference is found due to effect of combined ballistic training and yogic practices given to the experimental group on reaction time when compared to control group.

**Keywords:** Ballistic training, yogic practices, reaction time

### INTRODUCTION

The relationship between cognitive dimensions and motor movements (De and Mondal, 2020) is one of the psychomotor's traits. Motor skills include movement, coordination, response time, manipulation, kinesthetic awareness, dexterity, elegance, strength, and movement speed serve as examples of the psychomotor component. These characteristics were created by psycho, or the mind, and motor, or the body. It will take more time if every actions are not considered carefully with regard to the "motor". All motor movements are controlled by the mind since team sports have become increasingly understandable (Islam, 2020). A group of recent high school graduates were given a variety of cognitive and psychomotor tasks in order to examine the structure and components of psychomotor skills (Chaiken et al 2000).cricket game require the ability, in sometimes very warm conditions, to sustain a concentrated effort of six hours or more without fatigues. Their bodies must at any time be competent for explosive works. So, the psychomotor function in all departments of cricket game is the fundamental requirement for success. Several psychomotor, physiological, and physical protocols were used in modern cricket coaches to identify young talent. Ballistic training, which is frequently mistakenly known as power training, is a type of exercise that combines throwing and jumping with weights to improve explosive power. Ballistic refers to a type of training that involves explosively projecting an external item or an athlete's body into a flight phase activities that fall under this category include jumps, throws, and strikes. Ballistic workouts aim to maximise an

object's acceleration phase of motion while minimising its deceleration phase (Leck& Kraemer 2013). Yoga exercises develop a course that is essential to the body's healthy functioning. Yoga nourishes, stimulates, and maintains the balance of the endocrine organs that control growth and advancement. Regular yoga practise enhances processing and breathing skills, resulting in more energy being made available to the developing child. By increasing the flow of fresh blood to the brain, it raises mental capacity. The practise of yogic exercises strengthens the muscles and nerves, which enhances the physiological function of a wide range of structures. Moreover, it helps joints, regulates breath and blood pressure, and advances authentic basic improvements.

## METHODOLOGY

To achieve the purpose of the study thirty cricket players have been randomly selected from various PSG college of arts & science, coimbatore, Tamil Nadu and India. The age of the subjects were ranged from 18 to 25 years. The selected subjects were divided into two groups with fifteen subjects in each group. The experimental group underwent a effect of combined ballistic training and yogic practices programme for six weeks. The control group was not participating in any other training during the course of the study. Reaction time was taken as criterion variable in this research. The selected subjects were tested on reaction time was measured through Stick drop method (Distance on ruler 20 centimeters). To determine whether there had been a significant improvement, the dependent't' test was used to analyse the data, and an ANCOVA was used to see whether there had been any significant differences between the groups. To examine the level of significance difference, if any, across groups, the.05 level of confidence was fixed.

**TABLE – I**

### **SHOW THE MEAN AND 'T' RATIO OF COMBINED BALLISTIC TRAINING AND YOGIC PRACTICES ON PSYCHOMOTOR PROFILES AMONG COLLEGE MEN CRICKET PLAYERS**

| S.No | Variables          | Mean and SD    | YPG    | CG    |
|------|--------------------|----------------|--------|-------|
| 1    | Resting Pulse Rate | Pretest mean   | 0.163  | 0.164 |
|      |                    | SD (±)         | 0.0024 | 0.003 |
|      |                    | Post test mean | 0.144  | 0.161 |
|      |                    | SD (±)         | 0.008  | 0.006 |
|      |                    | 't' test       | 18.16* | 1.46  |

The Table I show that the pre-test mean value of reaction time on experimental group and control groups are 0.163 and 0.164 post test means are 0.144 and 0.161. The obtained dependent t-ratio values between the pre and post test score of experimental and control groups are 18.16 and 1.46. The table value required for significant difference with df 14 at 0.05 level is 2.15. Since, the obtained "t" ratio value of experimental group is greater than the table value, it was under should that the effect of combined ballistic training and yogic practices group had significant improvement the reaction time. However, the control groups significantly not improvement. The obtained't' value is less than the table value, as they not subject to any specific training.

TABLE – II

**VALUES OF ANALYSIS OF COVARIANCE FOR EXPERIMENTAL AND CONTROL GROUPS  
ON REACTION TIME AMONG INTER COLLEGIATE MALE CRICKET PLAYERS**

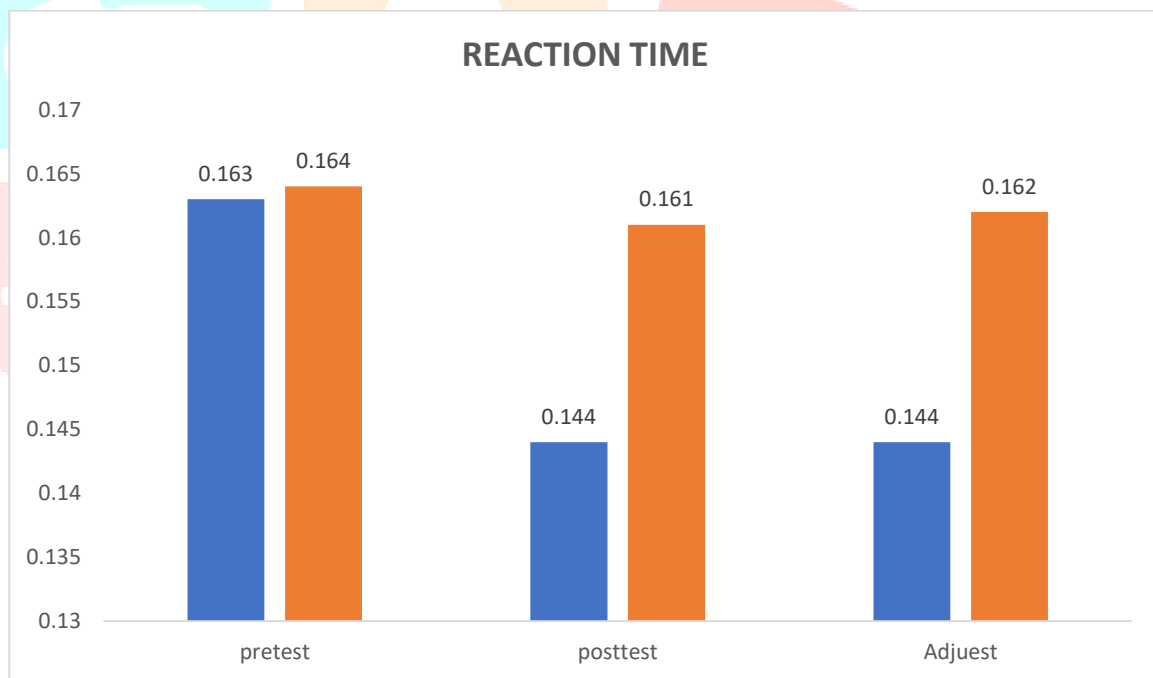
| Variables     | Adjusted post-test means |       | SOV | SS    | DF | MS    | F-ratio |
|---------------|--------------------------|-------|-----|-------|----|-------|---------|
|               | BTG                      | CG    |     |       |    |       |         |
| Reaction Time | 0.144                    | 0.162 | B.S | 0.002 | 1  | 0.002 | 72.79   |
|               |                          |       | W.S | 0.001 | 27 | 2.95  |         |

\* Significant at. 0.05 level

Table-II shows that the adjusted post test mean value of reaction time for combined ballistic training and yogic practices group and control group are 0.144 and 0.162 respectively. The obtained F-ratio of 72.79 for the adjusted post test mean is more than the table value of 4.21 for df 1 and 27 required for significance at 0.05 level of confidence. Since the value of F-ratio is higher than the table value, it indicate that there is significant difference exit between the adjusted post-test means of combined ballistic training and yogic practices group in improving the reaction time when compared to control group.

Figure – I

**THE PRE, POST AND ADJUSTED MEAN VALUES OF REACTION TIME OF BOTH  
EXPERIMENTAL AND CONTROL GROUPS.**



## DISCUSSION ON FINDINGS

The results of the find out about point out that the experimental team which underwent effect of combined ballistic training and yogic practices team had confirmed considerable improvement reaction time in contrast to manipulate group. The control crew did not enhancement on reaction time. The past studies on selected psychomotor variables also with regard to their coordination skills, cricket players of different ages differ significantly. In order to improve psychomotor ability, a thorough training regimen must be followed by there is a significant difference exists among different age levels cricket players in respect of coordinating ability. A proper training schedule must be taken to enhance psychomotor ability (Dey & Goon, (2020). Suresh and Yoga (2021) Reaction time saw a big improvement. However, the six weeks of effect of combined aerobic training and yogic practises worked better for the experimental group.

## CONCLUSION

On the statements of the results obtained the below conclusions are drawn,

1. After the training period, there was a substantial difference in reaction time between the experimental and control groups.
2. The speed of reaction significantly improved. Yet, the six weeks of effect of combined ballistic training and yogic practices worked better for the experimental group.

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