



## Effect of Isolated and Combined Intermittent Training, Continuous Running Training on Selected Coordinative Ability Components of Inter School Cricket Players

### KEYWORDS

Intermittent training, Continuous Running, Combined intermittent training and Continuous Running, Speed

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**ABSTRACT** *The present study is designed to find out the effect of isolated and combined intermittent training, continuous running training on speed performance of inter school cricket players. To attain the purpose, sixty men (N=60) Cricket players studying from various schools in Ramanathapuram District, Tamilnadu during the year 2014-2015 were selected randomly as subjects. The subjects were assigned at randomly into four groups of fifteen each (n=15). Group-I underwent Intermittent training, Group-II underwent Continuous Running Training, Group-III underwent Combined intermittent training and Continuous Running Training and Group-IV acted as Control. The duration of the training period for all the three Experimental groups was restricted to twelve weeks and the number of sessions per week was confined to three in a week. For Combined intermittent training and Continuous Running the training period was restricted to alternative weeks for twelve weeks. Among various Coordinative ability components, only the Speed is selected as a dependent variable. Speed was assessed by 50 Meters Run test. All the subjects were tested prior to the training and immediately the training was given to all the selected variables. Data were collected and statistically analyzed using ANCOVA. Scheffe's post hoc test was applied to determine the significant difference between the paired means. In all the cases 0.05 level of significance was fixed. The results of the study showed that there was a significant difference among all the Experimental groups namely Intermittent Training, Continuous Running Training and Combined Intermittent Training and Continuous Running Training groups and significantly increased in the Speed Performance. Further the results of the study showed that the Combined intermittent training and Continuous Running group was found to be better than the Intermittent training group and Continuous Running group in Speed.*

### INTRODUCTION

Today's world is full of competition and the rivalry to reach top and excel each other is too much. Every aspect which contributes to the excellence is carefully looked and one of such aspects is selection to the right person for the right event in the sports and games, which is normally a choice of selection is given to the player or the athlete. The players without knowing their inherent potential make wrong selection suiting to the individual concern and are not able to reach the top of the ladder in the sports arena.

The word "training" means different things in different fields. Training denotes the process of preparation for a particular task. This process varyingly extends to a number of days and even months and years. The term "Training" is widely used in sports. 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. This increasing skill and energy capacities need equal consideration (Singh, 1991).

Intermittent exercise is a term used to describe a variety of different physical training types. The term "intermittent," which means to stop and start at intervals, and the term "interval," as in interval training, is used somewhat interchangeably. In most circumstances, interval training will be conducted as a high intensity exercise activity.

The major point of interval training is that if the work rate or intensity is increased while work duration is held constant, the athlete will increase his work capacity to higher levels (Sreedhar, 2007).

Continuous training is a type of physical training that involves activity without rest. This type of training may be of high intensity, of moderate intensity with an extended duration, or fartlek training.

Continuous training means the person training uses 60-80% of their maximum heart rate for at least 30-60 minutes at least four or five times a week. This method suits long distance runners as well as tennis players etc, because it means that their endurance levels will increase, and it is the way which they would normally compete. Continuous training is a good way for an athlete to build up their cardio-vascular endurance levels. Continuous training forms the basis for all other training methods both anaerobic and aerobic (Seaton, 1983).

### METHODOLOGY

The study was conducted on sixty men (N=60) Cricket Players who are studying in various schools in Ramanathapuram District, Tamilnadu during the year 2014-2015 were selected randomly as subjects. Subjects were randomly assigned equally into four groups. Group-I underwent the Intermittent training, Group-II underwent the Continuous Running Training, Group-III underwent the Combined intermittent training and Continuous Running Training and Group-IV acted as Control. The experimental groups underwent the respective training for a period of 12 weeks (3 days/week), the Combined intermittent training and Continuous Running the training period was restricted to alternative weeks for twelve weeks whereas the control remain as normal with the sedentary life. Among various Coordinative abilities only the Speed component is selected as a dependent variable, and it was assessed by the 50 meters run test. All the four

groups were tested on the selected Speed and analyzed before and after the training period.

**ANALYSIS OF THE DATA**

The data collected from the experimental groups and control group on prior and after experimentation on selected variables were statistically examined by analysis of covariance (ANCOVA) and it was used to determine the differences, if any adjusted post test means found on se-

lected criterion variables separately. Whenever they obtained f-ratio value in the simple effect was significant to the Scheffe's test and it was applied as a post hoc test to determine the paired mean differences, if any. In all the cases 0.05 level of significance was fixed.

The Analysis of covariance (ANCOVA) on Speed in Experimental Groups and Control group have been analyzed and presented in the Table -1.

**Table – 1**  
**Values of Analysis of Covariance for the Experimental Groups and Control Group on Speed**

| Test               | Adjusted Post test Means    |                                   |  |               | Source of Variance | Sum of Squares | df | Mean Squares | 'F' Ratio |
|--------------------|-----------------------------|-----------------------------------|--|---------------|--------------------|----------------|----|--------------|-----------|
|                    | Intermittent Training Group | Continuous Running Training Group | Combined Intermittent Training and Continuous Running Training Group | Control Group |                    |                |    |              |           |
| Pre Test           | 7.69                        | 7.66                              | 7.67   | 7.68          | Between            | 0.006          | 3  | 0.002        | 0.06      |
|                    |                             |                                   |  |               | With in            | 1.80           | 56 | 0.032        |           |
| Post Tests         | 7.22                        | 7.50                              | 7.15   | 7.68          | Between            | 2.76           | 3  | 0.92         | 10.05*    |
|                    |                             |                                   |  |               | With in            | 5.13           | 56 | 0.09         |           |
| Adjusted post Test | 7.20                        | 7.51                              | 7.15   | 7.68          | Between            | 2.84           | 3  | 0.95         | 19.08*    |
|                    |                             |                                   |  |               | With in            | 2.73           | 55 | 0.05         |           |

\* Significant at.05 level of confidence

(The table value required for Significance at 0.05 level with df 3 and 55 & 3 and 55 is 2.77)

Table-1 shows the pre test means of Speed for Intermittent Training group, Continuous Running Training group, Combined Intermittent Training and Continuous Running Training group and Control group are 7.69, 7.66, 7.67 and 7.68 respectively. The obtained pre test F-ratio is 0.06, the f-ration values is less than the table value of 2.76 for df 3 and 56 at 0.05 level of confidence. The results of the study showed that there is no significance improvement of pre test values among the groups.

The post test mean values of Speed for Intermittent Training group, Continuous Running Training group, Combined Intermittent Training and Continuous Running Training group and Control group are 7.22, 7.50, 7.15 and 7.68 respectively. The obtained post test F-ratio is 10.05, the f-ration values is higher than the table value of 2.76 for df 3 and 56 at 0.05 level of confidence. The results of the study showed that there is significance improvement of post test values among the groups.

The adjusted post test mean value in Speed for the Intermittent Training group, Continuous Running Training group, Combined Intermittent Training and Continuous Running Training group and Control group are 7.20, 7.51, 7.15 and 7.68 respectively. The obtained adjusted post test F-ratio is 19.08, the f-ration values is higher than the table value of 2.77 for df 3 and 55 at 0.05 level of confidence. The results of the study showed that there is significance improvement of post test values among the groups.

To determine which of the paired means had a significant difference, Scheffe's test was applied as Post hoc test and the results are presented in the Table-2.

**Table - 2**  
**The Scheffe's test for the differences between the adjusted post tests paired means on Speed**

| Certain Variables | Adjusted Post test Means    |                                   |  |               | Mean Difference | Confidence Interval |
|-------------------|-----------------------------|-----------------------------------|--|---------------|-----------------|---------------------|
|                   | Intermittent Training Group | Continuous Running Training Group | Combined Intermittent Training and Continuous Running Training Group | Control Group |                 |                     |
| Speed             | 7.20                        | 7.51                              | --   | --            | 0.31*           | 0.14                |
|                   | 7.20                        | --                                | 7.15   | --            | 0.05            | 0.14                |
|                   | 7.20                        | --                                | --   | 7.68          | 0.48*           | 0.14                |
|                   | --                          | 7.51                              | 7.15   | --            | 0.36*           | 0.14                |
|                   | --                          | 7.51                              | --   | 7.68          | 0.17*           | 0.14                |
|                   | --                          | --                                | 7.15   | 7.68          | 0.53*           | 0.14                |

\* Significant at.05 level of confidence

Table-2 shows the adjusted post test mean differences on Speed between the Intermittent Training group and Continuous Running training group, Intermittent training group and Control group, Continuous Running training group and Combined Intermittent Training and Continuous Running training group, Continuous Running training group and Control group, Combined Intermittent Training and Continuous Running training group and Control group are 0.31, 0.48, 0.36, 0.17 and 0.53 respectively and they are greater than the confidence interval value 0.14, which shows the significant differences at 0.05 level of confidence.

The adjusted post test mean differences on Speed between the Intermittent training group and Combined Intermittent Training and Continuous Running training group is 0.05, which is lesser than the confidence interval value 0.14, which shows there is no significant differences at 0.05 level of confidence.

The results of the study further have revealed that there is a significant difference in Speed between the adjusted post test means of Intermittent Training group and Continuous Running training group, Intermittent training group and Control group, Continuous Running training group and Combined Intermittent Training and Continuous Running training group, Continuous Running training group and Control group, Combined Intermittent Training and Continuous Running training group and Control group.

The results of the study further have revealed that there is no significant difference in Speed between Intermittent training group and Combined Intermittent Training and Continuous Running training group.

However, the decrease in Speed was significantly higher for Combined Intermittent Training and Continuous Running training group than the other Experimental groups.

It may be concluded that the Combined Intermittent Training and Continuous Running training group has exhibited better than the other experimental groups in decreasing Speed.

The adjusted post test mean value of Experimental groups on Speed is graphically represented in the Figure -1.

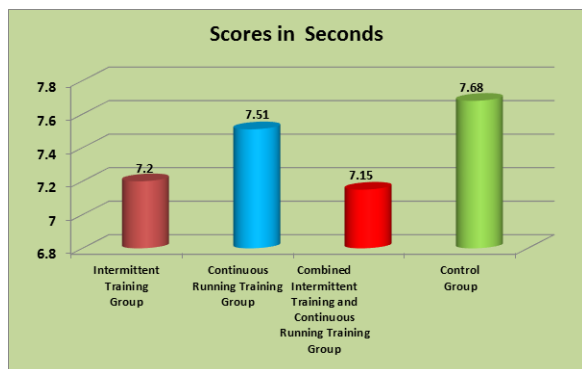


Figure-1

Bar diagram on ordered adjusted means of Speed

**CONCLUSION:**From the analysis of the data, the following conclusions were drawn.

Significant differences in achievement were found between

the Intermittent Training group, Continuous Running Training group, Combined Intermittent Training and Continuous Running Training group and Control group in the selected criterion variable such as Speed.

The Experimental groups namely, Intermittent Training group, Continuous Running Training group, Combined Intermittent Training and Continuous Running Training group had significantly improved in Speed.

The Combined Intermittent Training and Continuous Running Training group were found to be better than the Intermittent Training group, Continuous Running Training group and Control group in decreasing the Speed.

## REFERENCES

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