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## The influence of pre-season training on speed among state level cricketer players

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### Abstract

The purpose of this study is to find out the influence of pre season training on speed among state level cricketers. Randomized single group experimental design was followed for this study. The cricketers were selected randomly who participated at state level cricket championship (n=30). The subjects were randomly divided into two groups, each group consisting of 15 cricketers. Group I was treated with pre season training and termed as experimental group. And group II was considered as control group and they were not participated any treatment. Before the experimental period, each subjects were measured of their physical fitness variable selected for this study. After the completion of the experimental period again the subjects were tested of 50 meter dash. The difference between the initial and final scores of the groups was considered as the influence of pre season training. The obtained data were subjected to statistical treatment using ANCOVA. In all cases 0.05 level was fixed to test the significance of the results. Thus, it was proved that pre season training group gained mean difference of 0.01 which was due to pre season training given to cricketers and the difference was found to be significant at 0.05 level. It was concluded that pre season training improved physical fitness variable such as, speed of the cricketers.

**Keywords:** Pre-season, cricket, speed

### Introduction

Sport plays a very prominent role in the modern society. It is important to individuals, a group, a nation and indeed the world. Throughout the world, sport has a popular appeal among people of all ages and both sexes. Much of the attraction of sport comes from the wide variety of experience and feeling that result from participation such as success, failure, exhaustion pain, relief and feeling of belonging. Sport can bring money, glory, status and goodwill. However, sport can also bring tragedy, grief and even death. (Coakley, Jay J., 1998) [2].

### Physical Fitness

The term fitness is an important aspect to be developed in the minds of all the people irrespective of age and sex. Much attention has to be focused on youth physical fitness. A sound and well organized physical education programme in the schools and colleges will be right solution for these problems. (Ross, 2001) [4].

### Speed

Speed is defined as “the ability to move the entire body rapidly from one place to another.” Even though speed and reaction time are somewhat related, they are distinct characteristics and it is possible for people to be lacking in one of the traits and skill have an abundance of the others. There are different forms of speed.

- a) Speed of a very movement of body segments.
- b) Running Speed for a very short distance (acceleration rate) and
- c) Maximum running speed

Speed of movements is highly specific to areas of the body. An individual with fast arm may have slow leg movements. For example in fact this specifically extends even to the type of task and the direction of movement. Running speed can be discussed in terms of two factors; rate of acceleration and maximal velocity. (Feynman, 1993) [3].

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**Reasons for selection of the study**

The aim of physical training is to achieve better performance by toning up specific physical fitness and physiological condition. Pre season -training is termed a period before to the starting of the regular season which is devoted to training and preparation. During this phase researches proved that oxygen uptake, (the body's ability to process oxygen) decreases by 4 percent, performance times decrease by 2 percent – 5 percent, blood volume decreases by 9 percent after 2-4 weeks, thus the speed/strength muscle fibers may also have decreased from 26 percent to 43 percent. Studies show that regaining the fitness levels, highly trained athletes There are lack researches to specifically pin point how much selected physical fitness variables of cricket players increased due to pre season training. Hence, the researcher has selected this study to find out the pre season training on selected physical fitness of cricket players.

**Statement of the problem**

The purpose of this study is to find out the influence among pre season training on speed of state level cricketers.

**Significance of the Study**

This study is significant in following respects:

- The study is significant in assessing the existing physical fitness variables level of state level cricketers.
- The study is significant in formulating pre season training programme for the benefit of the cricketers.
- The study is significant in finding out the influence pre-season training on selected physical fitness levels of state level cricketers.
- This study will help to evaluate and compare the abilities and capacities of the cricketers by themselves and by coaches and physical educators.
- This study will help the budding researchers to take up similar studies in other areas and disciplines.

**Delimitations**

The study was delimited in the following ways:

- This study was confined to 30 cricketers who had represented their districts in state level Championships.
- The age is ranged between 19 years to 25 years.
- The study was conducted on the selected physical fitness variable (speed) of cricketers.
- The variables selected for the study were assessed by

standardized test item.

**Limitations**

This study is limited in the following aspects and these limitations have to be taken into considerations.

- The students were from different social, economic and cultural status which was taken as a limitation for this study.
- Heredity and environmental factors which contribute to performance have not been controlled.
- No effect would be made either to control or to asses the quality of the food ingested, life style, effect of metabolic functions as these are recognised as a limitations for this study.
- No other motivational technique was followed to assess selected fitness and physiological variables.

**Methodology**

**Selection of Subjects**

The purpose of the study was to find out the effects of pre season training on speed of state level cricketers.

To achieve the purpose of this study, thirty state level cricketers who have participated at state level cricket Championships were selected. The selected subjects' ages were ranged between 19 years to 25 years.

**Selection of variables**

**Dependent Variables**

**Physical Fitness Components**

1. Speed

**Independent Variables**

1. Pre-season Training for 8 weeks.

**Pre-season training**

The pre-season training sessions were conducted in weekly six sessions, except Sunday both at morning and evening.

**Results and discussions**

**Results on speed**

The initial and final means on pre-season training group and control group on Speed through Analysis of Covariance (ANCOVA) is presented in Table I.

**Table 1:** Computation of analysis of covariance on speed

	EXP i	Control	SOV	SOM	Df	Mean Squares	Obtained F
Pre Test Mean	7.51	7.48	Between	0.01	1	0.01	0.04
			Within	5.31	28	0.19	
Post Test Mean	7.50	7.62	Between	0.11	1	0.11	0.60
			Within	5.09	28	0.18	
Adjusted Post Test Mean	7.48	7.63	Between	0.17	1	0.17	8.50*
			Within	0.54	27	0.02	
Mean Diff	-0.01	0.14					

Table F-ratio at 0.05 level of confidence for 1 and 28 (DF) =4.20, 1 and 27(DF) =4.21.

\* Significant

The pre test mean on experimental group was 7.51, and control group was 7.48 and the obtained F value was 0.04, which was less than the required F value of 4.20 to be significant. Hence, it was not significant and the groups were equal at initial stage.

The comparison of post test means, experimental group 7.50 and control group 7.62 proved to be significant at 0.05 level

as the obtained F value 0.60 was greater than the required table F value of 4.20 to be significant at 0.05 level.

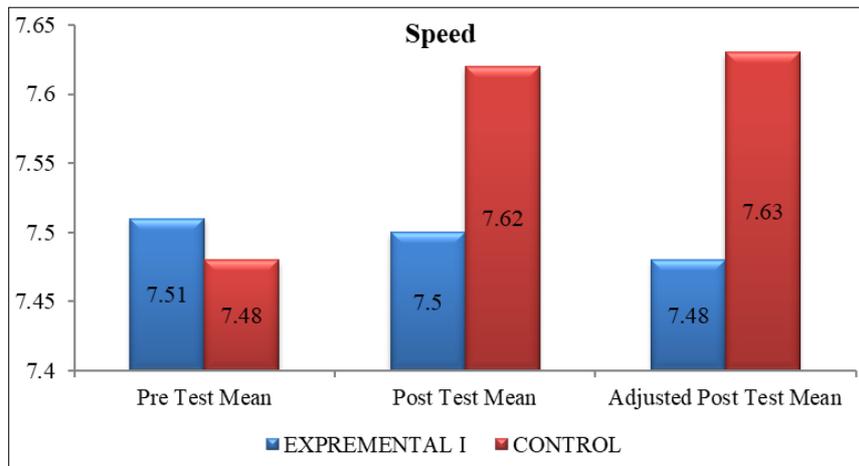
Taking into consideration the initial and final mean values adjusted post test means were calculated and the obtained F value of 8.50 was greater than the required F value to be significant 4.21 and hence, there was significant difference.

Thus, it was proved that pre-season training group gained

mean difference of -0.01 which was due to pre-season training given to cricketers and the difference was found to be significant at 0.05 level. Thus, the formulated hypothesis that pre-season would be significant in improving Speed is

accepted at 0.05 level.

The initial, post and adjusted means values of experimental and control group on Speed is presented in Figure 1 for better understanding of the results of his study.



**Fig 1:** Bar Diagram Showing Initial, Final and Adjusted Means on Speed of Experimental and Control Groups

### Conclusions

Within the limitations and delimitations of the study, the following conclusions were drawn.

- It was concluded that pre-season training improved physical fitness variable such as, speed of the cricketers.

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