Effect of Ladder Training on Selected Physical Fitness Variables on Intercollegiate Cricket Players

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Abstract- *The purpose of this study was to find out the effect of ladder training on selected physical fitness variables on intercollegiate cricket players. To achieve the purpose fifteen intercollegiate cricket players were randomly selected from the MMD College, Sabroom. The subject's age was ranged from 18 to 25 years. The selected subjects were considered as only one group. The following criterion variables were selected for the study such as physical fitness variables namely,agility and explosive power. Thetraining period was for eight weeks, four days a week two sessions each day. Data were collected from each subject before and after the eight weeks of training. The collected data were statistically analyzed by using't' ratio. It was concluded that there is a significant improvement due to ladder training on agility, explosive poweron intercollegiate cricket players.*

Keywords- Laddertraining,Physical fitness

I. INTRODUCTION

The history of cricket in India shows that it has fostered both nationalism and communalism; therefore it is relevant to outline a short history of the development of cricket in some regions of India. It is important to note that the sport developed differently at different times in and in different parts of the Indian subcontinent. The links between cricket and independent 'Indian' consciousness can first be seen in the late 19th century.

The founding of the Indian National Congress (INC) party in 1885 came about at the same time as the establishment of cricket as a popular sport in Bombay – the first Indian team to tour England was a Paris team in 1888. These developments occurred at a time when in England writers such as John Ruskin were proposing new ideas regarding socialism and nationalism – Mohandas Karamchand Gandhi said that Ruskin had a huge influence on his life.

Training is an educational process. People can learn new information, re-learn and reinforce existing knowledge and skills, and most importantly have time to think and consider what new options can help them improve their effectiveness at work. Effective training conveys relevant and useful information that inform participants and develop skills and behaviors that can be transferred back to the workplace.
The word 'Training' has been a part of human language since ancient times. It denotes the process of preparation for some task. This process invariably extends to a number of days, even months and years. The term 'Training' is widely used in sports. There is, however, some disagreement among sports coaches and also among sports scientists regarding the exact meaning of this word. Some experts, especially belonging to sports medicine, understand sports training as basically doing physical exercises.

A ladder workout is a method of strength and sports training where you perform one or more exercises with an ascending and descending repetition pattern. Ladders are muscular endurance and conditioning workouts designed to help you increase your overall training volumes while maintaining proper form and technique. The number of exercises per workout and the number of reps between sets depends on your muscular strength and endurance. In general, beginner ladders involve one exercise, while advanced ladders involve two or three.

II. OBJECTIVE

The objective of the study was to know the effect of ladder training on selected physical fitness variables on intercollegiate cricket players.

III. HYPOTHESIS

It was hypothesized that there would be a significant difference between pretest and posttest due to training on physical fitness variables.

IV. METHODOLOGY

The purpose of the study was to find out the effect of ladder training on selected physical fitness variables on intercollegiate cricket players. To achieve the purpose of the study, 15 students were selected as subjects from the MMD College,Sabroom, and Tripura by applying random sampling method. The age of the subjects ranged from eighteen to

twenty five years. The selected subjects were considered as one group. The following criterion variables were selected for the study such as physical fitness variables namely,agility and explosive power. Thetraining period was for eight weeks, four days a week two sessions each day**.**

V. SELECTION OF VARIABLES

Independent variables

- ❖ Ladder training

Dependent variables

- ❖ **Physical fitness variables**
  - Agility
  - Explosive power

VI. EXPERIMENTAL DESIGN

For this study, fifteen school boys were randomly selected from the MMD College, Sabroom,Tripura. The selected subjects were considered as one group. The following criterion variables were selected for the study such as physical fitness variables namely,agility and explosive power. Name of the test and unit of measurement for both the variables are shown in table I. Thetraining period was for eight weeks, four days a week two sessions each day.

TOOLS AND TECHNIQUE

TABLE-I

Variables	Name of the Test	Unit of measurement
Agility	shuttle run	In second
Explosive power	Vertical jump	In centimeter

TRAINING PROGRAMME

Double leg lateral hops- forward, Hop scotch – forward, Single leg lateral hops, Twist jump, Double leg lateral hop overs, Double leg front/back hops, Double leg lateral hops-backward, Fast feet, Single leg lateral hop overs, Hop scotch – forward skip a hole, Lckey shuffle, 5 hops & run, Crossover run, Side straddle hop, Carioca, In & out, Centipede, River dance, Back & forth, Single leg shuffle, Double trouble.

STATISTICAL TECHNIQUE

The following statistical procedure was employed to estimate the effect of ladder training on selected physical fitness variables on intercollegiate cricket players. 't' ratio was calculated to find out the significant of the difference between the mean of pre and post test of the group.

VII. RESULTS AND DISCUSSION

LADDER TRAINING GROUP ON AGILITY

The data obtained on agility of the ladder training group were analyzed using the 't' ratio and are presented in table -II.

TABLE II
TABLE SHOWING THE MEAN DIFFERENCE, STANDARD DEVIATION AND 't' VALUE OF LADDER TRAINING GROUP ON AGILITY

Variables	Design	Mean	Sd	df	t-ratio
Agility	Experimental Pre Test	15.05	0.58	14	7.73
	Experimental Post Test	14.83	0.56		

* Significance at 0.05 level of confidence

To find out the significant difference between pre test and post test on agility of ladder training group 't' ratio was employed and the level of significance was set at 0.05. The ladder training group pre test mean value was 15.05 and post test mean value was 14.83 respectively. The mean difference value was 14 and ladder training group obtained 't' ratio was 7.73 was greater than the table value 2.14. It shows that the ladder training group had significant improvement on agility. Pre test and post test results of ladder training group on agility showed in figure 1.

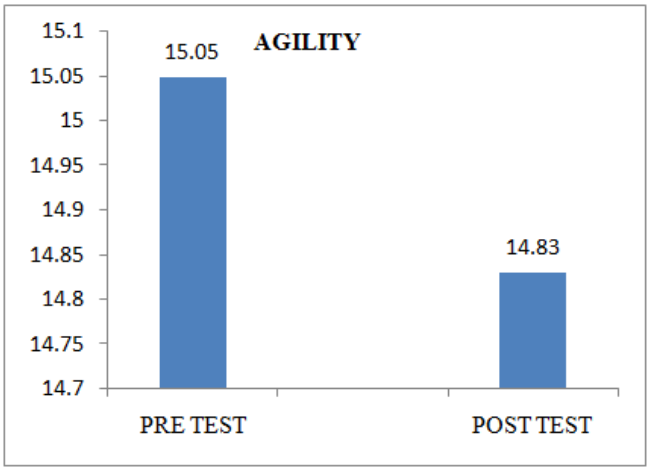

FIGURE 1
FIGURE SHOWING THE MEAN VALUES OF LADDER TRAINING ON AGILITY

LADDER TRAINING GROUP ON EXPLOSIVE POWER

The data obtained on explosive power of the ladder training group were analyzed using the 't' ratio and are presented in table -III.

TABLE III
TABLE SHOWING THE MEAN DIFFERENCE, STANDARD DEVIATION AND 't' VALUE OF LADDER TRAINING GROUP ON EXLOSIVE POWER

Variables	Design	Mean	Sd	Df	t-Ratio
Explosive Power	Experimental Pre Test	2.85	0.07	14	2.08
	Experimental Post Test	2.87	0.07		

* Significance at 0.05 level of confidence

To find out the significant difference between pre test and post test on explosive power of ladder training group't' ratio was employed and the level of significance was set at 0.05. The ladder training group pre test mean value was 2.85 and post test mean value was 2.87 respectively. The mean difference value was 14 and ladder training group obtained 't' ratio was 2.08 was greater than the table value 2.14. It shows that the ladder training group had significant improvement on explosive power.

Pre test and post test results of ladder training group explosive power are showed in figure 2.

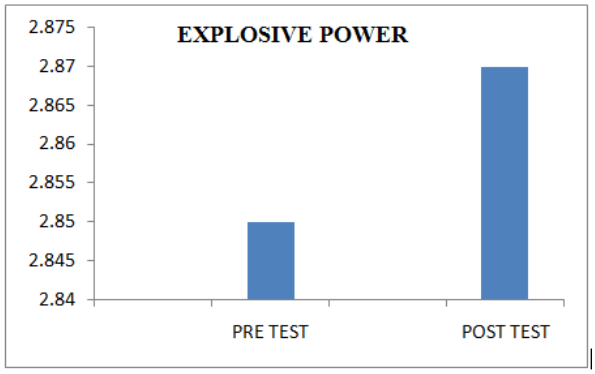

FIGURE 2
FIGURE SHOWING THE MEAN VALUES OF LADDER TRAINING GROUP ON EXPLOSIVE POWER

CONCLUSION

It is concluded that there was a significant improvement due to ladder trainingon agility, explosive powerof intercollegiate cricket players.

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