

## EFFECTS OF PLYOMETRIC DRILLS TRAINING ON THROWING ABILITY OF BASKETBALL MALE PLAYERS

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### Abstract

*The purpose of the study was to find out the Effects of Plyometric Drills Training on Throwing Ability of Basketball Male Players. 16 male Basketball players were selected purposively from I.I.T., Banaras Hindu University, Varanasi U.P. (India). Their age ranged from 18-28 years. Keeping the feasibility in mind throwing ability had been selected for this study. Throwing ability was assessed by given (Number of Trials) ten trials from a distance of 40 feet using baseball pass. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) technique to find out the Effects of Plyometric Drills Training on Throwing Ability of Basketball Male Players. The level of significance was set at 0.05. The Analysis of Co Variance for Throw for Accuracy Test indicated that the resultant F ratio of 13.005 was significant at 0.05 level of confidence. The F ratio needed for significance with 1/ 13 degree of freedom is 4.60 at 0.05 level of confidence. The same table indicated that there was a significant difference in adjusted means of Throw for Accuracy test of Basketball players between experimental and control groups. Significant Difference was found in Throwing Accuracy. The rate of improvement in throwing abilities was higher for the experimental group in comparison to control group.*

**Keywords:** Throwing, Accuracy, Plyometric and Training

### Introduction

Polymeric is defined as exercises that enable muscles to reach maximum strength in as short a time as possible. This speed-strength ability is known as power. Although most coaches and athlete know that power is the name of the game, few have understood the mechanics necessary to develop it. To help you understand Polymeric, I will review some of the important point of the muscle physiology. This will serve to demonstrate the simple, yet complex, way in which Polymeric training relate to better performance. Polymeric is defined as exercises that enable muscles

to reach maximum strength in as short a time as possible. This speed-strength ability is known as power. Although most coaches and athlete know that power is the name of the game, few have understood the mechanics necessary to develop it. To help you understand Plyometric, I will review some of the important point of the muscle physiology. This will serve to demonstrate the simple, yet complex, way in which Plyometric training relate to better performance. (Donald A. Chu, 1998) Physical Education has, long believed that exercise is essential to maintain good health. During the past twenty years great deal of evidence has been reported by the Medical Resources supporting the value of vigorous exercises for the promotion of health. Effect of training package and components or those developments of enrich one health and another health which related to certain disease. (Jackson, 1987) Plyometric (Plyo-more or greater; metric-measured or quantity) exercise is based upon the belief that a rapid lengthening of a muscle just prior to the contraction will result in a much stronger contraction. (Clutch, 1983)

### Objective of the Study

Objective of the Study was to investigate the Effects of Plyometric Drills Training on Throwing Ability of Basketball Male Players.

### Selection of Subjects

For the present, study the 16 male basketball players were selected purposively from I.I.T., Banaras Hindu University, Varanasi U.P. (India). Their age ranged from 18-28 years. Subjects were distributed into experimental group (8 subjects in each group) and a control group.

### Selection of Variables

Keeping the feasibility criterion in mind, the following variables were selected for the present study:

#### Dependent variable

Throwing Ability

#### Independent Variable

Plyometric Drills Training

Variable	Criterion Measure
Throwing Ability	Numbers of trials from a distance of 40 feet using baseball pass

### Statistical Technique

The data was analysed by applying Analysis of Co-Variance (ANCOVA) Technique to find out the effects of Plyometric drills training on throwing ability of basketball male players. The level of significance will be set at 0.05.

### Results of the Study:

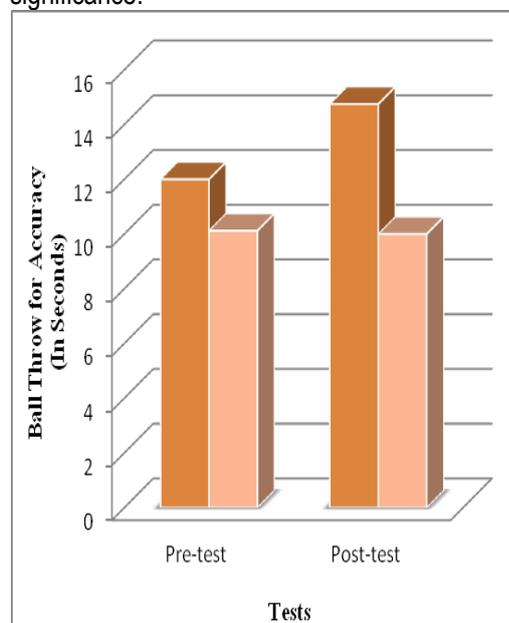
Table-1

Analysis of Co-Variance between Experimental and Control Group on Throw for Accuracy Test

Source of Variance	SSxy	SSyx	MSS	'F'
Treatment	9947.62	257739.1	257739.1	13.005*
Error	9673	257631	19817.8	
Total	274.62	107.66		

\*Significant at 0.05level. df: 1,13=4.60

Table: revealed that the Analysis of Co Variance for Throw for Accuracy Test indicated that the resultant F ratio of 13.005 was significant at 0.05 level of confidence. The F ratio needed for significance with 1/13 degree of freedom is 4.60 at 0.05 level of significance.



### Findings of the Study

It was evident that the treatment given to experimental group found to enhance the basket ball throwing ability in comparison to control group for pre test to post test (6weeks) test because that the tabulated value was found approximately more than three times higher than required value to be significant. The reason for

this may be that the basketball players have been exposed first time to Plyometric training programme which is highly scientific and systematic in nature because of which optimum adaptation and enhancement in throwing ability has been seen. It proved even by the available literature by Hardayal Singh coats in this book "Science of Sports Training" page No.26 that faster adaptation also accrue when new exercises are used to which the sportsmen are not habituated.

### Conclusion:

The rate of improvement in throwing ability was higher for the experimental group in comparison to control group. Training and training inclusive plyometric training improves throwing ability among basketball players relatively more. As whole pre-test to post-test improvement for basketball players is three times respectively. Author of the study feels in light of the same it will be highly appreciable if plyometric training drills will be included from the day one of the training.

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