

# Influence of Pressure Training and Resistance Training on the Performance of Shooting Accuracy of Men Basketball Players

**KEYWORDS** 

Pressure training, Résistance training, Shooting accuracy and Basketball players

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The purpose of the present study was to investigate the Influence of Pressure Training and Resistance Training on the Performance of Shooting Accuracy of Men Basketball Players. To achieve the purpose of the study forty five men players were selected from colleges affiliated to Manonmaniam Sundaranar University, during the year 2015-16. The subject's age ranges from 18 to 25 years. The selected players were divided into three equal groups consists of 15 men players each namely experimental group-I, experimental group-II and control group. The experimental group-I underwent Pressure training and experimental group-II underwent resistance training for six weeks. The control group was not taking part in any exercise during the course of the study. The purpose bounce and shoot test was proposed by the investigator to analysis their basic skill in shooting were taken as criterion variables in this study. Pre-test was taken before the exercise period and post- test was measured immediately after the six week exercise period. Statistical technique't' ratio was used to analyze the means of the pre-test and post test data of experimental groups and control group. The results revealed that there was a significant difference found on the criterion variables. The difference found is due to pressure training and resistance training given to the experimental groups on shooting accuracy when compared to control group.

### INTRODUCTION

Every one participates in some kind of sports activity or physical training during the course of his life. This training may assume different forms for different individuals. This training may influence physical, physiological and mental fitness of an individual. Physical fitness is a capacity for sustained physical activity. It is the key to success in every walk of life. To understand the concept of physical fitness and adapting a balanced approach to improve your state of fitness, it is important to develop and adopt sensible training habits towards fitness training. Research has revamped the whole concept of sports. Highly technological innovations through contribution from various disciplines, like medicine, engineering, human biology, psychology, biomechanics, exercise physiology etcetera have made the sports field more authentic, glamorous and appealing. Different methods are tried to spout out potential talents. A variety of training adoptions take place in the body that makes it to function more efficiently. Numerous training procedures are in practice to improve each and every physical and motor fitness quality at various levels. These basic training procedures will serve better when utilized with modifications suited to the individuals or a group dealt with. The best training programmed is that which increases the desired quality a higher rate without causing unwanted influences. Now day's sports activities are classified into several areas such as performance sports, physical education, rehabilitation sports, fitness and leisure sports and adventure sports. Performance sports aim at high sports performance and for that, the physical and psychic capacities of sports men are developed through various training means and methods. Most physical movements incorporate the elements of force quickness, duration, complexity and a range of motion to a certain extent.

### METHODOLOGY Selection of Subjects

The purpose of the study was randomly selected forty five men students from Manonmaniam sundaranar University affiliated colleges basketball players, during the year 2015-16 and their age ranged from 18 to 25 years.

#### **Experimental Group**

The subject was dived into three equal group's namely experimental group I, experimental group II and control group. The two experimental groups were undergone the experimental treatment for a period of six weeks of training so, the warming up exercise were given. The groups were given the following training, pressure training and resistance training.

# SELECTION OF VARIABLES Independennt Variables

- Pressure Training
- Resistance Training

## **Dependent Variables**

• Performance of Shooting Accuracy

# TRAINING SCHEDULE SCHEDULE FOR PRESSURE TRAINING

| Weeks | No. Of Attempts | No Of Sets |
|-------|-----------------|------------|
| I     | 25              | 2          |
| II    | 25              | 2          |
| III   | 50              | 2          |
| IV    | 50              | 2          |
| V     | 75              | 2          |
| VI    | 75              | 2          |

#### SCHEDULE FOR RESISTANCE TRAINING

| Weeks | No. Of At-<br>tempts | Rest(Seconds) | No Of Sets |
|-------|----------------------|---------------|------------|
| I     | 25                   | 20            | 2          |
| II    | 25                   | 20            | 2          |
| III   | 50                   | 15            | 2          |
| IV    | 50                   | 15            | 2          |
| V     | 75                   | 20            | 2          |
| VI    | 75                   | 20            | 2          |

#### **SELECTION OF TESTS**

| S.No | Performance Variables  | Test Items | Units                       |
|------|------------------------|------------|-----------------------------|
| 1    | Shooting Ac-<br>curacy |            | No of Successful<br>Attempt |

#### STATISTICAL TECHNIQUE

To study the influence of pressure training group (experimental group) and Resistance training group along with control group and to find out the significant mean differ-

ences among them, the analysis of covariance (ANCOVA) technique was employed. To study the influence of college men basketball players of pressure training group and Resistance training group and to find out the mean difference, the Analysis of covariance technique was employed.

#### ANALYSIS OF THE DATA

The significance of the difference among the means of experimental group was found out by pre-test. The data were analyzed dependent't' test and analysis of covariance (ANCOVA) technique was used with 0.05 levels as confidence

Table 1
Analysis of Covariance for the Pre, Post and Adjusted Post Test Means Values for Pressure Training Group, Resistance TrainingGroup and
Control Groups on Shooting Accuracy
(mean value count by No of Successful Attempt)

| Test              | Pressure<br>training<br>group | Resistance<br>training<br>group | Control<br>Group | Source of<br>Variance | Sum of<br>Square | df | Mean<br>Square | 'F' ratio   | Table value |
|-------------------|-------------------------------|---------------------------------|------------------|-----------------------|------------------|----|----------------|-------------|-------------|
| Pre Test<br>Mean  | 6.5333                        | 6.333                           | 6.0667           | Between               | 1.644            | 2  | .822           | .360        | 3.22        |
| SD                | 1.5055                        | 1.4960                          | 1.5337           | Within                | 96               | 42 | 2.286          | 1.300       | 3.22        |
| Post Test         | 12                            | 12.93                           | 5.80             | Between               | 450.978          | 2  | 225.489        |             |             |
| Mean<br>SD        | 1.8126                        | 1.6242                          | 1.5212           | Within                | 115.333          | 42 | 2.746          | 82.114 3.22 | 3.22        |
| Adjusted          | 12                            | 12.9333                         | 5.8              | Between               | 429.908          | 2  | 214.954        | 85.052      | 3.21        |
| Post Test<br>Mean | 12                            | 12.9333                         | 5.6              | Within                | 103.620          | 41 | 2.527          | 05.052      | 3.21        |

<sup>\*</sup>Significant at 0.05 level of confidence

The table I showed that the pre test mean values on Shooting Accuracy of pressure training group, Resistance training group and control group are 6.5333,6.333 and 6.0667 respectively. The obtained 'F' ratio .360 for pre test mean was less than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Shooting Accuracy . The post test mean values on Shooting Accuracy of pressure training group, Resistance training group and control group are 12,12.93 and 5.80 respectively. The obtained 'F' ratio 82.114 for post test mean was greater than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Shooting Accuracy. The adjusted post test means of pressure training group, Resistance training group and control group are 12,12.93 and 5.80 respectively. The obtained 'F' ratio 85.052 for adjusted post test mean was greater than the table value 3.23 for df 2 and 41 required for significance at 0.05 level of confidence on Shooting Accuracy. Since the obtained 'F' ratio value was significant further to find out the paired mean difference, the Scheffe's post hoc test was employed and presented in table II

Table-II
The Scheffe's Test for the Difference between
Paired Means on Shooting Accuracy

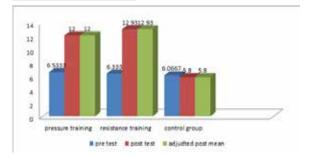
|          |            | -       | -       |              |
|----------|------------|---------|---------|--------------|
| Means    |            |         | Mean    | Da annina al |
| Pressure | Resistance | Control | Differ- | Required     |
| Training | Training   | Group   | ence    | Ci           |
| 12       | 12.9333    | -       | 0.933   | 1.57         |
| 12       | -          | 5.80    | 6.2     | 1.57         |
| -        | 12.9333    | 5.80    | 7.1333  | 1.57         |

<sup>\*</sup>Significant at 0.05 level of confidence

The table II shows that the adjusted post-test mean difference in Shooting Accuracy between pressure training group and resistance training group is 0.933 it is significant at 0.05 level of confidence and proved there was a significant improvement. Pressure training group and control group is 6.2 it is significant at 0.05 level of confidence and proved there was a significant improvement. Resistance training group and control group is 7.1333 it is significant at 0.05 level of confidence and proved there was a significant improvement. Hence, there was significant difference between control and experimental groups in Shooting Accuracy among college men basketball players. However, the mean difference between the two experimental groups was 0.933 which was not significant at 0.05 level of confidence. It may be concluded from the results that there was no significant difference between adjusted post means of pressure training group, Resistance training group. Statistically significant difference existed between the pressure training group and control group. The results of the study showed that there were a significant difference between resistance training group and control group, pressure training group and control group on shooting Acucuracy.

The adjusted post mean values of pressure training group, resistance training group and control group on Shooting Accuracy are graphically represented in the Figure 1

Figure 1
Bar Diagram Showing the Pre, Post and Adjusted Post
Test Mean Values Of Pressure Training Group, Resistance TrainingGroup and Control Groups on Shooting
Accuracy



#### **DISCUSSION OF FINDING**

The investigator was convinced with the results that the group practices in shooting accuracy with the pressure training and resistance training improve shooting accuracy Basketball. The training given to the experimental group with pressure training and resistance training had an influence on the experimental group and had shown improvement in shooting Accuracy than the control group in the final test. The training given to the experimental group was planned by the investigator in consultation with her guide and with great care. The investigator felt that ay one could become a good basketball player if he has good shooting accuracy.

### CONCLUSION

There was a significant improvement in shooting Accuracy on basketball. However the improvement was in favour for experimental groups namely pressure training and resistance training compare better than the control group due to six weeks of training programme.

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