



# REVIEW OF RESEARCH

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## EFFECT OF PHYSICAL EDUCATION PROGRAMME AND BASKET BALL DRILLS ON SELECTED HEALTH RELATED FITNESS VARIABLES AMONG HIGH SCHOOL BASKET BALL PLAYERS.

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### ABSTRACT:

The purpose of the present study was to find out the effect of physical education programme and Basket ball drills on selected health related fitness variables among high school Basket Ball players. To achieve the purpose of the study, 60 male subjects will be selected at random from Government High School, Dindigul, Tamilnadu, India. The age of the participants will be ranged between 12 and 15 years. The selected subjects will be randomly divided into three groups namely physical education group, Basket ball drill group and control group with twenty subjects ( $n=20$ ) in each group.

Experimental groups will undergo physical training and the control group will not have any training programme apart from their regular curricular activity. The analysis of covariance (ANCOVA) will be used to find out the significant difference. If the obtained 'f' ratio is significant, Scheff's test will be applied as a post hoc to determine the paired means difference. The results of the study showed that there was a significant improvement on selected health related fitness variables.



**KEYWORDS:** physical education programme and Basket ball drills , physical training.

### INTRODUCTION

"What our country wants are men of muscles of iron and nerves of steel, gigantic will which nothing can resist, which can penetrate into the in miseries and secrets of universe and will to accomplish the purpose in any fashion, even if it is meant going to the bottom of the ocean meeting death face to face"

SWAMI VIVEKANANDA

Physical education in schools concerns the involvement of children in fitness activities, sports, health and drug education, gymnastics and some aspects of dance. All are designed to encourage a healthier more enjoyable lifestyle.

Physical fitness refers to the organic capacity of the individual to perform the tasks of the daily living without undue tiredness and fatigue and still have a reserve of strength and energy available to meet satisfactorily sudden

emergency placed upon him. Physical fitness provides capacity for activity. Modern competitive performance demands severe training every day throughout the year to maintain fitness for performance at peak level.

Modern Basket Ball is a fast game. characterized by incredible athletic performances by athletes. In fact, modern Basket Ball players are able to perform many different moves, jumps, running, change of directions and technical

movements in very short time and with an order determined by the tactical situation.

### NEED OF HEALTH FITNESS ON SPORTS

Physical fitness refers to the organic capacity of the individual to perform the tasks of the daily living without undue tiredness and fatigue and still have a reserve of strength and energy available to meet satisfactorily sudden emergency placed upon him. Physical fitness provides capacity for activity. The techniques and skills in sports and games have advanced dramatically which demands the competitive sport participant to possess a high degree of physical fitness. Basket Ball and Basketball require physical fitness to enhance the performance.

### STATEMENT OF THE PROBLEM

The purpose of the study is to find out the effect of physical education programme and Basketball drills on selected health related fitness (cardio respiratory endurance and flexibility) among high school Basketball players.

### HYPOTHESES

It was hypothesized in the following manner.

1. There would be a significant difference among experimental groups and control group on selected criterion variables due to physical education programme and Basketball drill.
2. There would be a significant difference between experimental groups on selected criterion variables.
3. There would be a significant improvement on selected criterion variables due to physical education programme and Basketball drill.

### METHODOLOGY

#### Selection of Subjects

To achieve the purpose of the study, 60 male subjects will be selected at random from government high school, Dindigul, Tamilnadu, India. The age of the participants will be ranged between 12 and 15 years. The selected subjects will be randomly divided into three groups namely physical education group, Basketball drill group and control group with twenty subjects (n=20) in each group. Experimental groups will undergo physical training and the control group will not have any training programme apart from their regular curricular activity.

#### Selection of Variables

The following Physical education programme and Basketball drills will be selected as Dependent variables namely

#### Physical Education Programme

1. Free hand exercises.
2. Light apparatus exercise (Dumbbells, weights, laces and hoops)
3. Minor games (Relay games, Ball relay games and tag games)
4. Aerobic dance.
5. Com.visual program.

#### Basket Ball drills such as

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 1. Chest pass                      | 6. Long pass                      |
| 2. Overhead pass                   | 7. Run with ball passing relay    |
| 3. Bounce pass                     | 8. Jump and shoot                 |
| 4. Wrist pass                      | 9. High dribble                   |
| 5. Two men pass                    | 10. Low dribble                   |
| 11. Skill development visual fiber | 12. Using Technique visual method |

## TRAINING PROGRAMME

During the training period, the experimental group underwent their respective training programmes three days per week on alternate days for twelve weeks. The training session includes, warming up and warm down period.

Every session, the workout lasted for 45 to 60 minutes approximately. The training programs carried out in the play ground and athletic track. The subjects underwent their respective training programs as per the schedules under the supervision of the investigator. Each training session was conducted only in the evening time (5.00 to 6.00 pm. During experimental period control group did not participate in any of the special training.

## SELECTION OF DEPENDENT VARIABLES HEALTH RELATED PHYSICAL FITNESS COMPONENTS

- Flexibility
- Cardio respiratory endurance

## SELECTION OF TESTS HEALTH RELATED FITNESS VARIABLES

| CRITERION VARIABLES          | TEST ITEMS            | UNIT OF MEASUREMENT |
|------------------------------|-----------------------|---------------------|
| Cardio Respiratory Endurance | 1.5 mile run and walk | In Seconds          |
| Flexibility                  | sit and reach         | Centimeters         |

## THE SCHEFFE'S POST HOC TEST FOR THE DIFFERENCES BETWEEN PAIRED MEANS ON FLEXIBILITY

| PHYSICAL EDUCATION GROUP | BASKET BALL GROUP | CONTROL GROUP | MEAN DIFFERENCES | CONFIDENCE INTERVAL VALUE |
|--------------------------|-------------------|---------------|------------------|---------------------------|
| 24.13                    | 21.95             | -             | 2.18*            | .88                       |
| 24.13                    | -                 | 19.87         | 4.26*            | .88                       |
| -                        | 21.95             | 19.87         | 2.08*            | .88                       |

\* Significant at .05 level of confidence.

## RESULT OF THE STUDY ON FLEXIBILITY

The result of the study showed that there was significant difference among the adjusted post-test means of physical education group, Basket Ball drill group and control group on flexibility. Hence, it was concluded that physical education programme and Basket Ball drill improves flexibility.

## THE SCHEFFE'S POST HOC TEST FOR THE DIFFERENCES BETWEEN PAIRED MEANS ON CARIO REPIRATORY ENDURANCE

| PHYSICAL EDUCATION GROUP | BASKET BALL GROUP | CONTROL GROUP | MEAN DIFFERENCES | CONFIDENCE INTERVAL VALUE |
|--------------------------|-------------------|---------------|------------------|---------------------------|
| 655.91                   | 654.67            | -             | 1.24             | 4.90                      |
| 655.91                   | -                 | 672.55        | 16.64*           | 4.90                      |
| -                        | 654.67            | 672.55        | 17.87*           | 4.90                      |

\* Significant at .05 level of confidence.

## THE RESULT OF THE STUDY ON CARDIO RESPIRATORY ENDURANCE

The result of the study showed that there was significant difference among the adjusted post-test means of physical education group, Basket Ball drill group and control group on flexibility. Hence, it was concluded that physical education programme and Basket Ball drill improves flexibility.

## STATISTICAL TECHNIQUE

The analysis of covariance (ANCOVA) will be used to find out the significant difference. If the obtained 'f' ratio is significant, Scheffe's test will be applied as a Post hoc to determine the paired means difference. In all the case level of confidence will be fixed at .05 to test the significance.

## DISCUSSION ON FINDINGS

There was a significant improvement on selected criterion variables such as flexibility and cardio respiratory endurance, due to physical education programme and Basket Ball drill among them. The Basket Ball drill group dominated in the improvement on selected criterion variables.

The results of the study showed that there was a significant difference between experimental groups on selected criterion variables such as flexibility and cardio respiratory endurance due to physical education programme and Basket Ball drill. Hence, the researcher's second hypothesis was accepted.

## CONCLUSIONS

- It was concluded that physical education programme group and Basket Ball drill group significantly improved flexibility of the school boys and comparing between the experimental groups, it was found that physical education programme group was significantly better than Basket Ball drill group.
- It was concluded that physical education programme group and Basket Ball drill group significantly improved cardiorespiratory endurance of the school boys and comparing between the experimental groups, it was found that there was no significant differences.

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