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## Core strength and yoga training on playing ability of the women basketball player

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### Introduction

**Pilates:** Since last 7 years pilates has gained momentum and attention as a modality for improving flexibility, strength and mind body awareness. Pilates exercise focus on strength, core stability, flexibility, muscle control, posture and breathing. Exercises can be mat based or specialized equipment. These exercises can be adopted to provide either gentle strength training for rehabilitation or a strenuous workout vigorous enough to challenge skilled athletes. There is cautious support for the effectiveness of pilates in improving flexibility, abdominal and lumbo-pelvic stability and muscular activity. Researches has been found that the center of gravity, concentration, control, precision, flow and breathing are the key principles to be managed for pilates training with an apparatus for change in physical fitness levels.

Core stabilization has become a staple in most rehabilitation, fitness, and performance enhancement programs. Professional athletes of all kinds have discovered that adding Pilates to their training can improve performance, reduce injury, speed recovery, and help their hardworking bodies stay balanced and healthy. Pilates are all about training people to use their core specifically the muscles of the stomach and hip related floor. Consist of a series of precise movements and workouts that train the human body to move more powerfully. This relieves pairs from the poor posture.

**Yoga:** Yoga is the physical, mental and spiritual practices for the healthy life, which originated in ancient India. Yoga as exercise is a modern exercise practice influenced by hatha yoga which includes asana, pranayama and savasana. The true definition of yoga is the union of ones mind, body and spirit. Yoga is a systematic path leading to enlightenment and self realization that yoga means union between the individual self and universal consciousness, and that the goal of yoga is to attain perfect control over the modifications of the mind. Knowing the popularity of yoga,

Hon'ble Prime Minister Narendra Modi suggested international yoga day on 21<sup>st</sup> June. Therefore since 2015 we are celebrating yoga day which makes everyone to aware the benefits of yoga. It is always good to lead a healthy life and stay active.

### **Statement of the problem**

The purpose of the study is to find out the effect of pilates and yoga training on basketball playing ability.

### **Objective of the study**

To determine the effect of pilates and yoga training on basketball playing ability.

### **Delimitations**

- The study was delimited to forty basketball players.
- The mean age is 18-21 years.
- The minimum participation criteria of the subjects are inter college level.
- Pilates and yoga training is for three alternate sessions per week and is continuous for 6 weeks.
- The duration of each session is one and half an hour.

### **Limitations**

- The socio economic status and the body type of the subjects were not taken into consideration.
- The subjects engagement and the effect of different other games on their playing ability was not taken into consideration.

### **Methodology**

This study was involving the experimentation of pilates and yoga training on basketball playing ability. For this purpose, forty college girls those who were studying in engineering college of Hyderabad and age ranged between 18 – 21 years were randomly selected. The minimum criteria that the subjects must have participated in inter college level tournaments in basketball were randomly selected. The subjects were divided into two equal groups of twenty each. Out of

which group-A were undergone pilates and yoga training and group-B is the ideal group (control group) who did not involve pilates and yoga training apart from the regular activities. The training was carried out for three alternative days of pilates and yoga training for six weeks. Prior to training and after the training the subjects were tested for Basketball playing ability by administering Knox basketball test. The collected data was processed with appropriate statistical tool.

### Analysis of data

The subjects were pre and post tested on Knox basketball test before the training and after the training. The data collected were analyzed by paired t test to investigate the effect of yoga and pilates exercise on basketball playing ability and presented in the following table.

Table: Comparison of Mean values of Pre and Post test of Knox basketball test

Test	Mean	SD	T-Value	P-value
Pre Test	81.07	24.52	3.0751	0.0039
Post Test	60.42	17.34		

The above table indicates that the mean pre test of pilates and yoga training is 81.07±24.52 and the mean post test of pilates and yoga training is 60.42±17.34. The derived 't' value i.e., 3.0751 is higher than the 't' critical value i.e., 2.02 at the significant P value 0.0039. As the calculated value is higher than the table value, it is clear that there is significant difference between the pre and post test of the pilates and yoga training on the basketball players.

**Result :** The data revealed that pilates and yoga training has a significant effect on basketball players.

**Conclusion :** The results of the study stated that the combination of pilates and yoga training will definitely improve the basketball skill by increasing the core stability and shooting accuracy.

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