Effect of specific basketball training program on physical fitness and skill performance variables of inter collegiate women basketball players

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Abstract

The purpose of the study was to find out the effect of Specific Basketball Training program on Physical variable and skill performance variables on Inter Collegiate women basketball players. To achieve the purpose of these study 30 Inter Collegiate female basketball players were selected from Bharathiar University, Coimbatore, Tamilnadu, India. They were divided in to two equal groups namely Specific Basketball Training program group (Group -1) and Control group (Group -2). The total period of training was 12 weeks. After 12 weeks of training period data was collected on dependant variables for both the groups. The collected data was statistically analyzed by using “t” test. Based on the results it was concluded that the specific Basketball Training program group was significantly improved the selected physical variable (agility) of female Basketball players.

Keywords : Basketball Players, Physical variable, agility and females.

Introduction

Basketball is one of the most popular teams based sports played and watched throughout the world. It is played by both men and women of all ages and fitness level. Successful game of basketball needs ability of the players to generate good speed, agility and tremendous power during the play of game. Skills like dribbling, shooting and passing are of utmost importance for a player at any level of play. Not merely skills but also physical and physiological characteristic of a player will contribute to the success of the player as well as of the team (Yogrj Thani, 1997).

Sport’s scientist Michael Yessis says that sports specific training must fulfill one or more of the following criteria: The exercise must duplicate the exact movement witnessed in a certain segment of the sports skill. The exercise must involve the same type of muscular contraction as used in the skill execution. The special exercise must have the same range of motion as in the skill action. The best sport specific exercise program, by definition, is playing own sport. The focus of training should be on the quality of movement wanted. To do this one need to develop his level of self- awareness and observational skills of himself in action.

Agility is important in all activities that require quick changes in positions of the body and its parts. In basketball, fast starts and stops and quick changes in direction are fundamental to good performance. Agility enables individuals to rapidly and precisely alters the position and direction of the body and is an important ingredient for successful participation in a wide variety of sports. An agile person can quickly and efficiently
mobilize the large muscle groups of the body in order to make rapid changes in direction of movement. Agility involves coordinating quickly and accurately the big muscle of the body in a particular activity. One's level of agility is probably a result of both innate capacity and training and experience. It is revealed to a great extent in sports involving efficient footwork and quick changes in body position force (Barrow and McGee, 1979).

**Methodology**

To achieve the purpose of this study 30 Inter collegiate female basketball players were selected from Bharathiar University, Coimbatore, Tamilnadu, India. They were divided into two equal groups namely specific basketball training program group (Group - 1) and control group (Group - 2). After assigning the subjects in various groups, T- test was conducted to assess the agility and score was recorded in seconds, and this was considered as a pre-test. After the pre-test, specific control group and Specific Basketball Training program basketball Training program group underwent the training for 12 weeks, and control group did not engage any training given by the scholar. After the 12 weeks, post-test was conducted for both groups, and score was recorded in seconds.

**Result and Discussion**

The game of basketball is recreational and a competitive game. It helps promotion of health, body control, alertness, co-ordination and team spirit (Derk Chan, 1999). Agility is the ability to rapidly change direction without losing speed, balance, or body control. Agility training reduces your risk of injury and helps build endurance which helps one make it through a single game and sometimes an entire season by giving more flexibility. This allows your body to accept the challenges that come with any physical activity.

Agility is very much involved in the game of basketball. A basketball player who passes his opponents stop quickly from one position to another or he does a complex routine. At the time of dribbling the player should change the movement in various ways. There are running in a zigzag manner and shifting the body position to maintain balance and his ability at the hands and arms.

Table -1 show that the pretest means on agility for the control group and Specific Basketball Training program group were 12.9373 and 12.7453 respectively. The obtained t ratio was 1.358. Since the obtained ‘t’ ratio was greater than the table value of 0.004, it was significant at 0.05 level of confidence and hypothesis was accepted.

<table>
<thead>
<tr>
<th>No. of observations</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>15</td>
<td>12.9373</td>
<td>0.1373</td>
</tr>
<tr>
<td>Experimental group</td>
<td>15</td>
<td>12.7453</td>
<td>0.0910</td>
</tr>
</tbody>
</table>

Table - 2 : Showing the Post-test mean difference between the Control Group and Sports Specific Training Group in Agility (seconds)

<table>
<thead>
<tr>
<th>No. of observations</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>15</td>
<td>12.8767</td>
<td>0.4880</td>
</tr>
<tr>
<td>Experimental group</td>
<td>15</td>
<td>12.4433</td>
<td>0.3831</td>
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</table>
A combined agility-balance training improved dynamic balance not only under visual control but also in eyes closed conditions. Training also increased run-out speed that likely contributed to better agility performance, reduced ground contact time during drop jump, and improved the ability to differentiate the force of muscle contraction during repeated jumps. However, such training has been found to be insufficient to improve both simple and multi-choice reaction time, and jumping performance. On the other hand, control group failed to show any significant improvement in examined abilities except for enhancement of jumping performance (Zemková and Hamar, 2010). This study confirmed that the Specific Basketball Training program group was significantly improved the selected physical variable (agility) of Woman Basketball players when compared to the control group.

References

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