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A COMPARATIVE ANALYSIS BETWEEN SPEED AND AGILITY BETWEEN COLLEGE MEN BASKETBALL AND NETBALL PLAYERS

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Abstract:

The purpose of the study was to compare the speed and agility between college men basketball and netball players. To achieve this purpose of the study, sixty men college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the anthropometrical variables, the following variables namely speed and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using stadiometer and weighing machine separately. The independent 't' ratio was used to analyze the significant difference if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered appropriate. The results of the study showed that there was a significant difference between basketball players and netball players on speed and agility.

Key Words: Speed, Agility, College Men Basketball Players, Netball Players

Introduction:

The realms of sports performance and athlete conditioning are fundamentally anchored on the attributes of speed and agility, particularly in high-intensity team sports such as basketball and netball. These physical qualities are critical determinants of success, influencing an athlete's ability to execute swift directional changes, rapid accelerations, and responsive movements, which are essential during competitive play. Consequently, understanding the differences in speed and agility among athletes from different sports can provide valuable insights into sport-specific training regimens and performance optimization. This study focuses on a comparative analysis of speed and agility between college men basketball and netball players, aiming to elucidate the distinct physical demands and conditioning strategies inherent to each sport.

Basketball and netball, while sharing some common elements such as court dimensions and the need for teamwork, present unique challenges that shape the physical profiles of their players. Basketball players often engage in a variety of explosive actions, including jumping, sprinting, and lateral movements, which necessitate a high degree of speed and agility. Netball, on the other hand, emphasizes quick footwork, frequent changes of direction, and precise movement within a more constrained space. These differences suggest that while both sports require excellent speed and agility, the specific demands placed on these attributes may vary, leading to divergent training approaches and physical adaptations.

Speed, defined as the ability to move rapidly across the ground, is a critical component in both basketball and netball. In basketball, players frequently need to sprint down the court during fast breaks, chase opponents, and transition between offense and defense. Netball players, although operating within a more confined area, still rely on quick bursts of speed to evade defenders and position themselves strategically. The comparative study of speed between athletes in these sports can reveal how different playing styles and court dynamics influence speed requirements and conditioning practices.

Agility, the capacity to change direction quickly and efficiently, is equally vital in both sports. Basketball players must navigate through opponents, execute dribble drives, and perform defensive maneuvers that demand exceptional agility. Similarly, netball players are required to pivot, dodge, and maintain balance while maneuvering in tight spaces. The agility of players in each sport is a reflection of their ability to adapt to the game's flow and maintain high performance levels under varying conditions. By comparing agility levels between basketball and netball players, this study aims to uncover the sport-specific agility demands and how they shape training methodologies.

This comparative analysis not only contributes to the academic understanding of sports science but also holds practical implications for coaches and trainers. By identifying the distinct speed and agility profiles of basketball and netball players, tailored training programs can be developed to enhance these critical attributes in a sport-specific context. Ultimately, the insights gained from this study can help in optimizing athlete

performance, reducing injury risks, and fostering a deeper appreciation of the nuanced physical demands inherent to different team sports.

Methodology:

The purpose of the study was to compare the speed and agility between college men basketball and netball players. To achieve this purpose of the study, sixty men college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the anthropometrical variables, the following variables namely speed and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using stadiometer and weighing machine separately. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate.

Analysis of the Data:

Speed:

The mean, standard deviation and 't' ratio values on speed of basketball players and netball players have been analyzed and presented in table 1.

Table 1: The Mean, Standard Deviation and 't' Ratio Values Between Basketball and Netball Players on Speed

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	8.69	0.09	7.21*
Netball Players	8.54	0.07	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table 1 shows that the mean values on speed for basketball players and netball players were 8.69 and 8.54 respectively. The obtained 't' ratio value on speed 7.21 which was greater than the table value required for significance with df 58 was 2.002.

The results of the study showed that there was a significant difference between college men basketball players and netball players on speed.

Agility:

The mean, standard deviation and 't' ratio values on agility of basketball players and netball players have been analyzed and presented in table 2.

Table 2: The Mean, Standard Deviation and 't' Ratio Values Between Basketball and Netball Players on Agility

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	10.72	0.03	4.69*
Netball Players	10.67	0.05	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table 2 shows that the mean values on agility for basketball players and netball players were 10.72 and 10.67 respectively. The obtained 't' ratio value on agility 4.69 which was greater than the table value required for significance with df 58 was 2.002.

The results of the study showed that there was a significant difference between college men basketball players and netball players on agility.

Conclusions:

- There was a significant difference between basketball players and netball players in speed.
- There was a significant difference between basketball players and netball players in agility.

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