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ROLE OF MOTOR FITNESS IN BASKETBALL PLAYERS' PERFORMANCE



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Short Profile

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ABSTRACT:

The objective of the study was to know the role of selected motor fitness components in basketball players' performance. Eighty inter university basketball players were randomly selected from different universities of Karnataka with the age ranging from 18-25 years. To achieve the objective of the study data pertaining to motor fitness was collected from each player. These include speed, leg power, agility, strength and the basketball players' performance was assessed by the experts with the help of subjective

judgment of experts during the match. To know the role of selected motor fitness components, the data collected was analyzed by using the Pearson's product moment correlation statistical technique and findings of the study showed that there is positive role of selected motor fitness components and Basketball players' performance.

KEYWORDS

Motor fitness, speed, leg power, agility, strength and performance.

INTRODUCTION: -

Nowadays, great number of young and even very young people plays basketball. Some of them play just for fun and recreation, some play in schools but some of them aim to make basketball as their profession. Here, coaches should use all available and proper means to help talented boys and girls to become good or excellent players. This requires serious and studious approach. The first step is to diagnose characteristics and abilities of young candidates crucial for success in basketball. Basketball is, also, one of most dynamic sports game with constantly changes of typical and atypical game situations, and with a lot of »critical« situation and emotional pressure.

One of the challenges that coaches face is that individual differences among athletes make each of them unique in their ability to succeed in sports. Height, body type, muscle fiber composition, motivational level, and learning styles are among the many factors that affect the rate at which athletes will become proficient. Analyzing motor abilities can help coaches optimize each athlete's genetic potential. Motor fitness components are inherited, relatively stable traits of athletes that are prerequisites for performing various sport skills. These abilities are predictors of sport.

OBJECTIVE OF THE STUDY:

The objective of the study was to know the role of selected motor fitness components in Basketball players' performance

PROCEDURE:

Subjects for the present study was Eighty (N=80) Basketballmale players (inter-university level) of age ranging from 18-25 years from various universities of Karnataka state. The random sampling technique was used to select the subjects during Inter University Basketball tournament .

Tools: The tools used for collection of data were standardized field tests .

Variables: Speed was measured with 50 mtrsdash to1/10th of a second. Leg Power was measured with standing broad jump in meters , agility was measured with the help of 10x 6 shuttle run in seconds ,strength was measured by pushups in numbers. Basketball players performance was assessed by the three basketball ball experts.

Statistical Analysis: The data collected to achieve the objective of the study wascomputed with Product moment correlation statistical technique. The level of significance was set at 0.05. Data was analyzed byusing SPSS Version 20.0 (Statistical Package for the Social Sciences, version 20.0, SPSS Inc, and Chicago, IL, USA)

Findings of the study: Data collected was treated with Product moment correlation and findings are presented in the following tables

TABLE – 1- Descriptive statistics of Basketball University Players

Sl. No.	Variables	Mean value	Standard deviation	N
1.	Speed	7.15	.248	80
2.	Leg power	52.69	7.99	80
3.	Agility	14.0590	1.55	80
4.	Strength	13.569	1.70	80
5.	Playing ability	40.59	5.80	80

The above table states the mean value and standard deviation of selected motor fitness variables of basketball university players.

Table – 2 Shows the relationship between selected Motor fitness components and Basketball players' performance

Sl. No.	Variables	Correlation coefficient
1.	Speed and Basketball playing ability	.469**
2.	Leg Power and Basketball playing ability	.414**
3.	Agility and Basketball playing ability	.246*
4.	Strength and Basketball playing ability	.365**

*Significant at 0.05 level

**Significant at 0.01 level

The above table indicates that Basketball players performance significantly related to basketball playing ability with the ' r ' value speed = .469**, Leg Power = .414**, Agility = .246* and strength = .365**. Therefore, it is evident that speed, Leg power, Agility and strength are contributing in positive way for the good performance in Basketball game.

CONCLUSIONS:

Researches in sport science that, as a criterion, set performance abilities, skills and the quality of performance of athletes in a competition, add a special contribution to sports practice. The criterion usually means a collection of variables by which a success in a sport (biomechanical) activity is defined. It mostly regards studies of abilities and characteristics of the most successful, top-quality athletes, and the factors that considerably affect them. The transformation processes in sport training can be more rationally implemented with this information. It will be easier to develop more objective and optimal procedure for selection and guidance of athletes, planning and programming of trainings, the choice of training devices, the development of abilities that are important for success, and the restrictive development of characteristics that affect success in a negative way. Therefore an objective assessment

of quality of an athlete is equally interesting both for coaches and researchers. The selected motor fitness components speed, leg power, agility and strength are contributing in the basketball players' performance. The nations exhibiting excellence in the international sports do attach great significance to the total fitness level of their players. Different sports activities call for different levels of fitness. The level of fitness varies depending upon the level of competition as well. Participation in the topnotch competitive Basketball requires the player to be in a state of optimum fitness.

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