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A COMPARATIVE STUDY OF ANTHROPOMETRICAL VARIABLES BETWEEN MALE BASKETBALL AND VOLLEYBALL PLAYERS OF UTTAR PRADESH

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ABSTRACT:

Purpose of the study was to compare anthropometrical variable between basketball and volleyball players. For the purpose of this study 60 male basketball and volleyball players were selected as the subject from Uttar Pradesh. Age of the subjects was ranged between 19 to 24 years. Selected anthropometric variables were measured by standardized anthropometric equipments. To compare anthropometric variable, independent t test was applied at 0.05 level of significance. The finding of the study reveals that there are significant difference in basketball and volleyball players in relation to leg length, arm length, height and weight. It was concluded that U.P. State male basketball players were greater in leg length, arm length, height and weight in comparison to male volleyball players.



KEYWORDS: Anthropometric, Attacking, Blocking, Serving, Dribbling, Shooting, Passing.

INTRODUCTION :

The game of volleyball takes two forms: the six-a-side indoor version, and beach volleyball, which is played in pairs. The beach variety emerged on the Olympic scene at Atlanta in 1996 and is considered to be the more glamorous of the two versions – perhaps due in part to suntanned bodies and the skimpy clothing worn by competitors!

However, in both disciplines the object of the game is the same: to get the ball to land in the opposition's half of the court. The emergence of beach volleyball – with the sand, sun, and cool-looking competitors making it far more popular than the indoor version – actually led the authorities to revamp the traditional game in recent times. The basics remained the same, but a new position – the 'libero' – was created in an effort to introduce longer rallies and more spectacular defensive play. Organizers also made the game even faster by declaring that either side could score a point on any rally, irrespective of who had served

Basketball is an athletic sport, that can be played both indoors and outdoors. Because of its continuous action and frequent scoring, basketball is one of the most popular spectator as well as participant sports in the world. Basketball, extremely popular around the world, is a court game played by two teams of five players each. The object is to put a ball through a hoop, or basket, and thus score more points than the opposing team. Although basketball can be played outdoors, it was invented to

serve as an exciting indoor exercise for the winter months in a northern climate. It quickly became a spectator sport, however, and now attracts large audiences to gymnasiums and arenas, especially in the United States, South America, and Europe. The sport is played on the amateur level by high schools, colleges, other groups, and, since 1936, by national teams in the Olympic Games. It also is played by professional athletes, notably in the United States and Europe. The foremost championships contended for are those of the National Basketball Association (U.S. professionals), the National Collegiate Athletic Association (U.S. colleges), and the Olympic Games. The game develops qualities such as obedience, discipline, sportsmanship, and loyalty between team members. Today all over the world physical educators and coaches are facing their greatest challenge in handling problems in scientific way i.e. to give their sportsmen proper and progressive guide-lines based on scientific approach which leads to desired results. Science, both physical and physiological have been recognized as one of the best means of underlying sportsman's performance and of helping in producing better performance. The physical educators, coaches and sportsmen an understanding of physical character and the physiology of exercise to becoming increasingly important, when everyone's understanding grows the trial error methods and application of guessing becomes less than adequate in preparing high level sportsman for competition. Performance in any sports activity depends to a large extent on physical fitness. Sports trainers concentrate on improving the physical fitness and motor abilities of a player, I.e., speed, strength, endurance, flexibility. Improving the physical fitness of a player is also called conditioning. A sound conditioning programme forms the most important part of training any sports person. Every sport demands motor abilities at various levels above the average.

METHODOLOGY

Selection of Subjects

For the purpose of the study 60 male basketball and 60 male volleyball players were selected as subject from Uttar Pradesh. Age of the subjects was ranged between 19 to 24 years.

Selection of Variables

On the basis of available literature and researcher own understanding following anthropometric variable were select.

- Leg length
- Arm length
- Height
- Weight

TABLE NO 1
CRITERION MEASURES

S.No.	Variable	Criterion Measures	Unit
1.	Leg Length	Steel Tape	Near to 1cm
2.	Arm Length	Steel Tape	Near to 1cm
3.	Height	Stadio Meter	Near to 1cm
4.	Weight	Weighing Machine	Near to 1kg

Statistical Procedure

Descriptive statistics will be used to find out the status of basketball and volleyball players in relation to anthropometric variables. To find out the significant difference independent ' t test' was employed at 0.05 level of significance.

TABLE NO 2
COMPARISON BETWEEN VOLLEYBALL AND BASKETBALL PLAYERS

Variable	Group	Mean	SD	t-Ratio
Leg Length	Basketball	98.23	4.44	11.05
	Volleyball	87.30	4.01	
Arm Length	Basketball	74.68	3.03	6.46
	Volleyball	67.58	5.20	
Height	Basketball	165.52	5.10	7.10
	Volleyball	158.10	3.98	
Weight	Basketball	68.58	5.10	6.24
	Volleyball	61.10	3.40	

Significant at 0.05 level $t(0.05) (98)=1.98$

Table- 2 reveals that the calculated value of t 11.05 was higher than tabulated value of 1.98 so we can say that male basketball players were significantly different from male volleyball players. Table- 2 reveals that the calculated value of t 6.46 was higher than tabulated value of 1.98 so we can say that basketball players were significantly different from male volleyball players. Table- 2 reveals that the calculated value of t 7.10 was higher than tabulated value of 1.98 so we can say that male basketball players were significantly different from male volleyball players. Table- 2 reveals that the calculated value of t 6.24 was higher than tabulated value of 1.98 so we can say that basketball players were significantly different from male volleyball players.

DISCUSSION OF FINDINGS

From the finding of the study it has been observed that there was significant difference between male basketball and male volleyball players in relation to anthropometric variables. The basketball players were found greater in leg length, arm length, height and body weight. Basketball is type of body contact game and training method is entirely different, more weight training pulling and pushing exercise and jumping exercises are very common where volleyball need agility based and speed endurance based training programme. Nature and demand of body physique is totally different in comparison to volleyball players. That is the reason of difference.

CONCLUSION

In the light of findings, it was concluded that U.P. State male basketball players were greater in all anthropometric variables leg length arm length height and body weight in relation to male volleyball players of U.P. State.

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