

ANTHROPOMETRIC PROFILE OF NATIONAL BASKETBALL PLAYERS

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Abstract:

The purpose of this study was to prepare a Anthropometric profile of national basketball players. Ninety six male basketball players in 67th National Basketball Tournament held at Guru Nanak Stadium, Ludhiana (Punjab) from 27th December 2012 to 04th January 2013 were selected as a subject for this study. Eight Anthropometric variables were taken for the study. To analysis the anthropometric data of National Basketball Players on their selected anthropometric variables, Descriptive statistics was applied. Level of significance was set at 0.05. Mean, standard deviation of different variables was, for Height M 1.90, SD 0.07, Sitting Height M 87.32, SD 6.55, Arm length M 90.63, SD63.24, Leg length 1.23, .11, Palm length 22.05, 3.56, Feet length M 29.05, SD 4.50, Shoulder Width M 45.22, SD 5.13, Weight M 80.14, and SD 8.25. Findings of this study will help the coaches and trainers to know the present scenario and physical requirement for the basketball players to achieve high performance.

KEYWORDS:

Basketball, Anthropometric Variables.

INTRODUCTION

The poor performance of Indian athletes and sportsmen at the International competitions has been of great concern, especially for the coaches, physical educationists and sports scientists. The physique and body composition, including the size, shape and form are known to play a significant role in this regard. Anthropometry involves the measurements of external parts of the body including body diameters, body circumferences and somato types. Human motor performance is a composite of many variables. One of which is the structure of the body. The specific measurements of the limbs lengths, circumference breath and body built index can reveal the relationship between the anthropometry of the athlete and his motor performance. Anthropometric measurements are central concerns of the first phase of the scientific era of measurement. Which began in the 1860's current interest in anthropometric measurements focuses on three areas: growth measures, body type and body composition. The uses of such measures include classification, prediction of growth patterns, and prediction of success in motor activities as well as assessments of obesity. Anthropometry has wide application as one of the essential parameters constituting the selective diagnostics of any game and spot. Measurement of body size included such descriptive information as height, weight and body surface area.

OBJECTIVE

The purpose of the study was to prepare an anthropometric profile of Basketball players.

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METHODS

Selections of Subjects

Ninety six male Basketball players in 67th National Basketball Tournament held at Guru Nanak Stadium, Ludhiana (Punjab) from 27th December 2012 to 04th January 2013.

Selection of Variables

Anthropometric variables

1. Standing height
2. Sitting Height
3. Arm Length
4. Leg Length
5. Palm Length
6. Feet Length
7. Shoulder width
8. Weight

COLLECTION OF DATA

The research scholar had a meeting with the Basketball players in the presence of their respective coaches. The purpose of the study was clearly explained to them so that there was no ambiguity among the subjects regarding the efforts, which they had to put in for the successful completion of the investigation. The data was taken at their respective rooms allotted for accommodation. Moreover, for full cooperation, data was taken when they were not busy and had enough time to spare for testing. Necessary instruction was given on to the subjects before the administration of each test.

STATISTICAL TECHNIQUE

To Analysis the anthropometric data of national Basketball players on their selected anthropometric variables descriptive analysis was applied at 0.05 level of significance.

RESULT

Table 1
Descriptive Analysis of Anthropometric Measurement of all selected National Basketball players.

Variable	Mean	Standard Deviation	Minimum	Maximum
Standing Height	1.91	0.07	1.67	2.05
Sitting Height	87.32	6.55	65	100
Arm Length	90.63	63.24	66	702
Leg Length	1.23	0.11	1	1.40
Palm Length	22.05	3.56	17	33
Feet length	29.05	4.50	21	43
Shoulder Length	45.22	5.13	21	57
Weight	80.14	8.25	62	98

Above table 1 showed descriptive analysis of anthropometric variables like standing height, sitting height, arm length, palm length, feet length, shoulder width, and weight separately. Mean, standard deviation, minimum, maximum, sum, range, kurtosis, skewness of height were 1.90, 0.07, 2.05, 183.36, 0.38, 1.14 and -0.66 respectively. The descriptive analysis sitting height were 87.32, 6.55, 65, 100, 8383, 35, 0.89 and -0.49 respectively. The descriptive analysis arm length were 90.63, 63.24, 66, 702, 8701, 636, 0.22 and 0.70 respectively. The descriptive analysis leg length were 1.23, .11, 1, 1.40, 118, 0.40, -0.17 and -0.91 respectively. The descriptive analysis palm length were 22.05, 3.56, 17, 33, 2205, 16, -0.07 and 0.76 respectively. The descriptive analysis feet length were 29.05, 4.50, 21, 43, 2789, 22, 0.60 and 0.97 respectively. The descriptive analysis shoulder width were 45.22, 5.13, 21, 57, 4342, 36, 0.22 and -0.97 respectively and lastly the descriptive analysis weight were 80.14, 8.25, 62, 98, 7694, 36, -0.48 and -0.13 respectively.

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CONCLUSIONS

Based on findings, the following conclusions were drawn.

- 1.It was found that average Standing height, Sitting height, Arm length, Leg length, Palm length, Feet length, Shoulder width, and Weight 1.91, 87.32, 90.63, 1.32, 22.05, 29.05, 45.22 and 80.14 respectively.
- 2.It was found that average Standing height was ranging in between 1.85 to 1.95 of all quarterfinalist teams.
- 3.It was found that average Arm length was ranging in between 82.33 to 137.41 of all quarterfinalist teams.
- 4.It was found that average Leg length was ranging in between 1.14 to 1.30 of all quarterfinalist teams.
- 5.It was found that average Palm length was ranging in between 20.41 to 26.00 of all quarterfinalist teams.
- 6.It was found that average Shoulder width was ranging in between 41.50 to 47.75 of all quarterfinalist teams.

Finding of this study will help the coaches and trainers to know the present scenario and physical requirement for the Basketball players to achieve high performance. It will also help for coaches to develop such a model according to current requirement of the game of Basketball.

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