

Analysis of Anthropometry and Jumping Ability among Volleyball and Basketball Players

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Abstract – Physical Movements are a biological necessity. The word Sports and games are highly ambiguous terms having different meaning. Sports are of generally individualistic, whereas games are activities where movements of the body change from one action to another action, as in the case of games like Hockey, Football, Basketball, etc. The objective of the present study is to bring forth the difference in the anthropometry and jumping ability among volleyball and basketball players. The present study was conducted on 12 volleyball and basketball players on the basis of random sampling. The age of the subject ranged from 18 to 22 years. It is concluded that volley ball players had better Anthropometric measurement of Height and Jumping Ability of Vertical Jump than the Basketball players. While basketball players were significantly superior in Anthropometric measurement of Weight and Jumping Ability of Standing Broad Jump than the Volleyball players.

Keywords: Anthropometric Measurement, Jumping Ability, Height and Weight.

INTRODUCTION

Physical Movements are a biological necessity. The word Sports and games are highly ambiguous terms having different meaning. Sports are of generally individualistic, whereas games are activities where movement of the body change from one action to another action, as in the case of games like Hockey, Foot ball, Basketball, etc. in these games all of a sudden certain movements are done to outwit the opponent.

OBJECTIVITY:

The objective of the present study is to bring forth the difference in the anthropometry and jumping ability among volleyball and basketball players.

METHODOLOGY:

The present study was conducted on 12 volleyball and basketball players on the basis of random sampling. The age of the subject ranged from 18 to 22 years.

HYPOTHESIS:

It is hypothesized that there exists significance difference in selected variables of anthropometry and

jumping ability among volleyball and basketball players.

Administering the questionnaire:

The anthropometry and jumping ability was administering to assess height, weight, vertical jump and standing broad jump among the selected subjected. The critical value for 0.05 level of significance for the sample group of 12 is 2.18*.

Analysis of the data collected:

Average score, standard deviation and T-test of Anthropometric measurement and jumping ability among Volley Ball and Basket Ball players were as mentioned in the table below:

Particular	Volley ball		Basketball		t-test value
	mean	S.D	Mean	S.D	
Height	168.67	3.94	166.58	12.59	0.533
Weight	60.17	4.48	67.92	4.97	5.02*
Standing Broad Jump	2.23	0.12	2.44	0.25	2.32*
Vertical jump	2.71	0.123	2.67	0.140	0.59

❖ The average score among the Anthropometric Measurement “Height” among both Volley Ball and Basket Ball players were 168.67 and 166.58 respectively. The standard deviation was 3.94 and 12.59. The ‘T’ test score was 0.533. Volley Ball Players were better in height than the basketball players and the ‘t’ test value of 0.533 shows that there existed no significant difference among both Volley Ball and Basket Ball players “Height” at 0.05 level of significance according to the ‘t’- test.

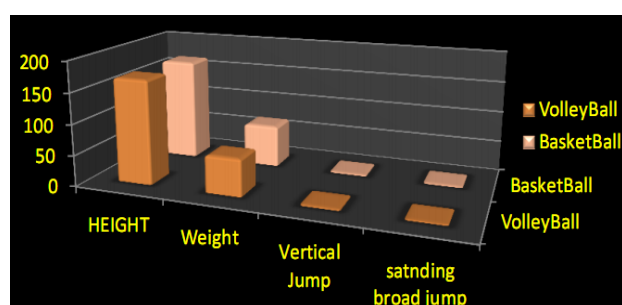
❖ The average score among the Anthropometric Measurement “Weight” among both Volley Ball and Basket Ball players were 60.17 and 67.92 respectively. The standard deviation was 4.48 and 4.97. The ‘T’ test score was 5.02*. The Basket Ball Players were heavier than the volley ball players and the ‘t’ test value of 5.02* shows that there existed significant difference among both Volley Ball and Basket Ball players “Weight” at 0.05 level of significance according to the ‘t’- test.

❖ The average score among the Jumping Ability “Standing Broad Jump” among both Volley Ball and Basket Ball players were 2.23 and 2.44 respectively. The standard deviation was 0.12 and 0.25. The ‘T’ test score was 2.32*. The quality of Explosive Strength of Legs was more among the Basket Ball Players and the ‘t’ test value of 2.32* shows that there existed significant difference among both Volley Ball and Basket Ball players “Standing Broad Jump” at 0.05 level of significance according to the ‘t’- test.

❖ The average score among the Jumping Ability “Vertical Jump” among both Volley Ball and Basket Ball players were 2.71 and 2.67 respectively. The standard deviation was 0.123 and 0.140. The ‘T’ test score was 0.59. The quality of Explosive of Strength legs was more among the Volley Ball Players and the ‘t’ test value of 0.50. shows that there existed no significant difference among both Volley Ball and Basket Ball players “Vertical Jump” at 0.05 level of significance according to the ‘t’- test.

FIGURE NO.1

Average scores of selected variables of Anthropometric measurement and jumping ability among Volley Ball and Basket Ball players.



CONCLUSION

On the basis of the result obtained after the statistical analysis of the data across the Anthropometric and Jumping ability of Volleyball and Basketball players, the following conclusions were drawn.

1. Volleyball players have better Anthropometric measurement of Height than the Basketball players.
2. Volleyball players have better Jumping Ability of Vertical Jump than the Basketball players.
3. Basketball players were significantly superior in Anthropometric measurement of Weight than the Volleyball players as per the ‘t’ test at 0.05 level of significance.
4. Basketball players were significantly superior in Jumping Ability of Standing Broad Jump than the Volleyball players as per the ‘t’ test at 0.05 level of significance.

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