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COMPARISON OF MOTOR FITNESS VARIABLES BETWEEN BASKETBALL AND VOLLEYBALL PLAYERS

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Abstract:

The purpose of the study was to find out the assessment on selected motor fitness variables between Basketball players from the Pondicherry University, and their age ranged from 20 to 25. Fifteen male Basketball and fifteen male Volleyball players of the Pondicherry University students were selected. Agility and reaction time were assessed using standard procedures. The reliability of data instrument reliability and subject's reliability by the test. In order to find out significant difference the collected data was statistically analyzed by applying 't' test and 0.05 level of confidence. It was concluded that the Basketball players were better than Volleyball players in agility. The Basketball players were better than Volleyball players in reaction time.

Introduction:

Physical education is an essential and integral part of the total education program and makes significant contributions towards the achievement of desire education and health outcomes through the medium of physical activity. Quality physical education programs promote the physical growth and development of children and youth while contributing in a wide variety of activities beginning with basic movement skills and progressing toward more complex sport, dance and other forms of movement. Ultimately, they should help young people keep physically fit and enjoy many forms of physical activity the school years and continuing throughout life. Physical education promotes the importance of inclusion of a regular fitness activity in the routine. Physical fitness is one of the most important elements of leading a healthy lifestyle. This helps the students to maintain their fitness, develop their muscular strength, increase their stamina and thus stretch their physical abilities to an optimum level. Physical fitness helps to inculcate the important of maintaining health body, which in turn keeps them happy and energized. Sound physical fitness promotes increased absorption of nutrients, better functioning of digestion and all other physiological processes and hence results in all around fitness (Jan et al. 2006).

Statement of the Problem:

The purpose of the study was to investigate the comparison of motor fitness variables between Basketball and Volleyball players.

Hypothesis:

It was hypothesized that there would be significant difference between motor fitness variables between Basketball and Volleyball players.

Methodology:

The purpose of the study was to find out the assessment on selected motor fitness variables between Basketball players from the Pondicherry University, and their age ranged from 20 to 25.Fifteen male Basketball and fifteen male Volleyball players of the Pondicherry University students were selected. Agility and reaction time were assessed using standard procedures. The reliability of data instrument reliability and subject's reliability by the test. In order to find out significant difference the collected data was statistically analyzed by applying 't' test and 0.05 level of confidence.

Results:

Table 1: Descriptive Statistics Relating to Agility Scores on Basketball and Volley Ball Players

	N	Mean	Std. Deviation
Basketball	30	18.086	0.3297
Volleyball	30	17.177	0.6210

Table 1 shows that the mean, standard deviation on Agility test of Basketball and Volleyball players. The means of Basketball and Volleyball players on Agility test is 18.086 and 17.177 respectively. From table I, reveals that there is an observed difference in the mean on agility score of Basketball and volleyball players. To examine whether these observed mean. Differences are due to the game nature o testing statistical significance. The 't' ratio table is given below.

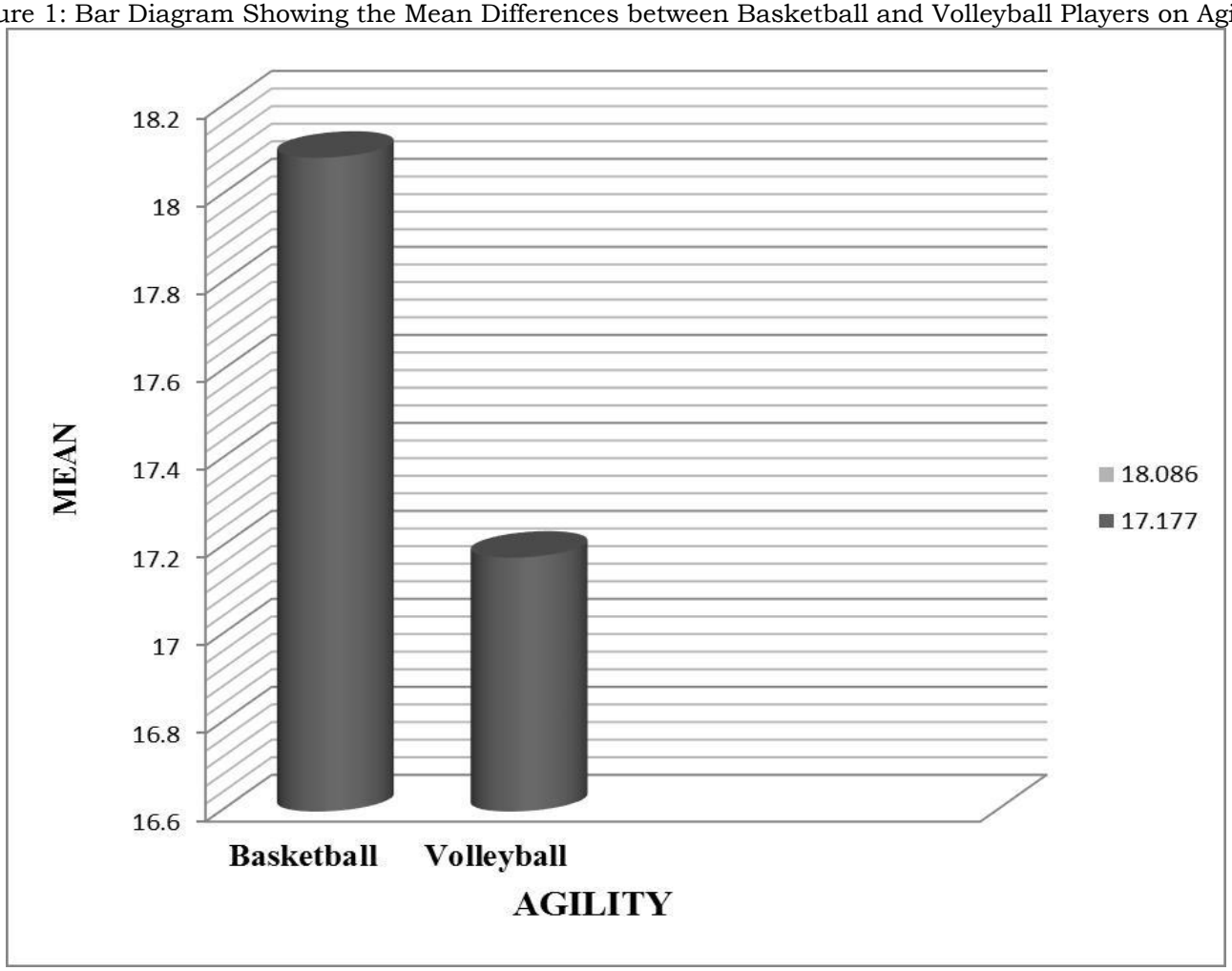
Table 2: Calculation of Between t - Ratio Basketball and Volleyball Players on Agility

Physical Variable	Comparison Group	Mean	Standard Deviation	Standard Error of Mean	Mean Difference	't' Ratio
Agility	Basketball	18.86	0.3297	0.0602	0.2913	7.078*
	Volleyball	17.177	0.621	0.1133		

* Significant at 0.05 level of confidence with 29 degrees of freedom. The table value at 0.05 level is 2.042.

The table 2 reveals that there is a significant difference in the Agility score Among Basketball and Volleyball players. is higher than the table value of 2.042. The table value of 't' confidence with degrees of freedom 29. So the hypothesis is accepted.

Figure 1: Bar Diagram Showing the Mean Differences between Basketball and Volleyball Players on Agility



The basic descriptive measure of central tendency and dispersion calculated on reaction time for boys are displayed in table 3.

Table 3: Descriptive Statistics Relating to Reaction Time Score on Basketball and Volleyball Players

	N	Mean	Std. Deviation
Basketball	30	7.687	0.3343
Volleyball	30	6.957	0.4909

Table 3 shows that the mean, standard deviation on Speed test for Basketball and Volleyball players on reaction time test is 7.687 and 6.957 respectively. From table 4 reveals that there is an observed difference in the mean on reaction time scores of Basketball and volleyball players. To examine whether these observed mean differences are due to the game nature or due to chance cause and applied t- ratio for testing statistical significance. The t-ratio table is given below.

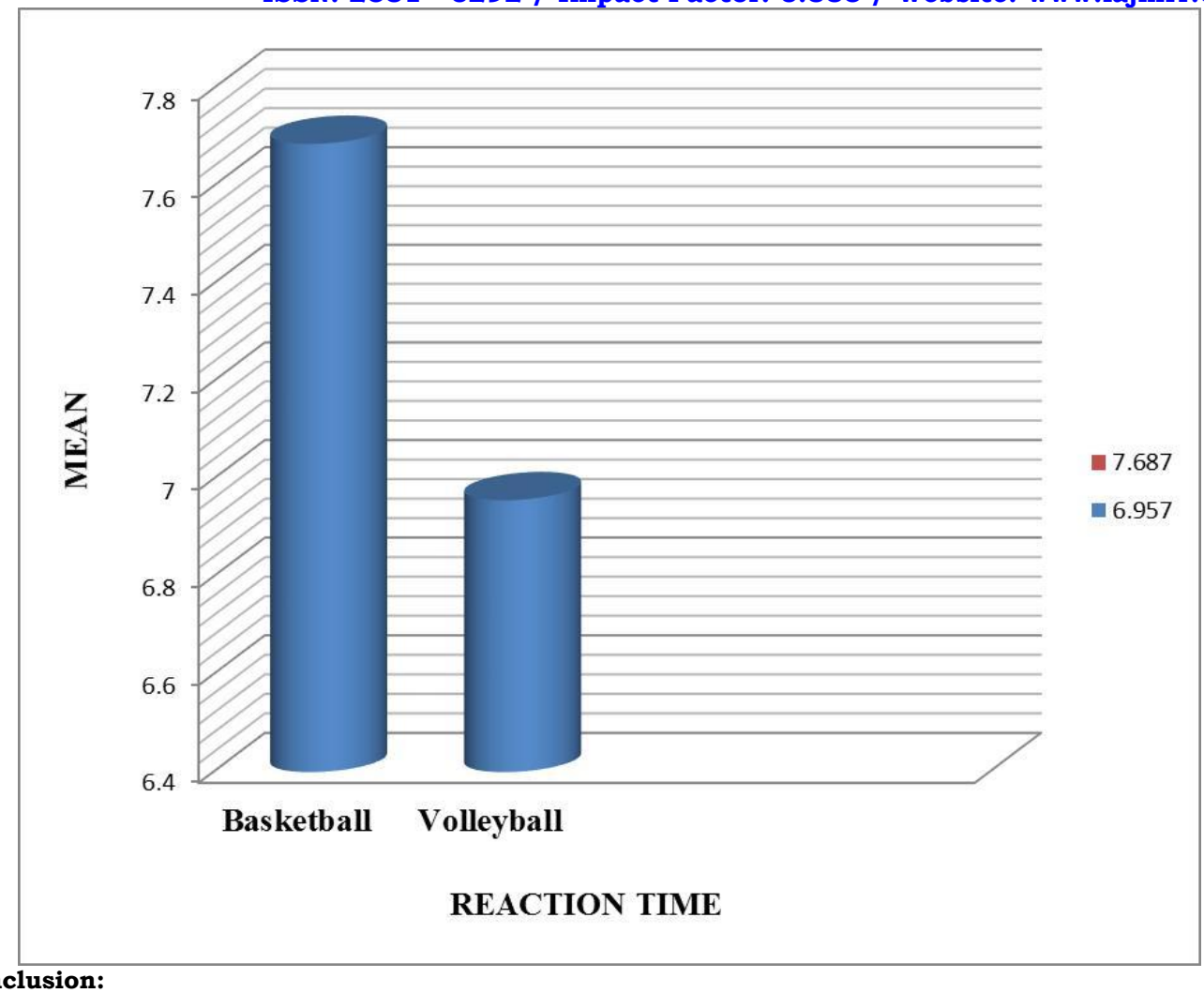
Table 4: Calculation of t - Ratio between Basketball and Volleyball Players on Reaction Time

Physical Variable	Comparison	Mean	Standard Deviation	Mean Differences	'T' Value
Reaction Time	Basketball	7.689	0.3343	0.73	6.732*
	Volleyball	6.957	0.4909		

* Significant at 0.05 level of confidence with 29 degrees of freedom. The table value at 0.05 level is 2.042.

The table 4 reveals that there is a significant difference in the reaction time Between Basketball and volleyball players. Since which is higher than the table value of 2.042. The table value0.05 level of ' of confidence with 29 degrees of freedom. So the hypothesis is accepted.

Figure 2: Bar Diagram Showing the Mean Differences between Basketball and Volleyball Players on Reaction Time



Conclusion:

- It was concluded that the Basketball players were better than Volleyball players in agility.
- The Basketball players were better than Volleyball players in reaction time.

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