

Agility: time taken by subjects to perform 4X10 mt. Shuttle run was recorded with the help of stopwatch.

Explosive Strength: The maximum height touched by the subjects in vertical jump, was recorded in centimetre.

Pulse Rate: Pulse Rate was measured by radial artery with the help of stop watch; the score was recorded in beats/min.

Vital Capacity: Vital Capacity was measured by Dry Spirometer .The score was recorded in litre.

Peak Flow Rate: Peak Flow Rate was measured by Peak Flow Meter. The score recorded was in ml/min.

Cardiovascular Endurance: Modified Harvard Step Test was used to measure the ability to work and to recover from the same.

Statistical Procedure

For analysis of the data, collected from 20 Volleyball and 20 Football players from Barkatullah University, Bhopal, Mean and SD was computed. Comparison was made on the basis of different team games i.e. Volleyball and Football for this purpose ‘t’ test was applied. For testing the hypothesis the level of significance was set at 0.05.

Findings

Table-1
COMPARISON OF MEANS OF SELECTED PHYSICAL VARIABLES OF VOLLEYBALL AND FOOTBALL PLAYERS

Components	Group	Mean	S.D.	T TEST
Flexibility	Volleyball	19.42	7.12	2.248*
	Football	14.6	6.42	
Endurance	Volleyball	2128.26	364.56	4.276*
	Football	2610.32	348.26	
Agility	Volleyball	11.36	0.58	1.782
	Football	11.06	0.48	
Explosive Strength	Volleyball	56	16.44	0.816
	Football	52	14.48	

* Significant at .05 level of significance $t_{(0.05)(38)} = 2.021$

Table 1 shows the comparison of means of selected physical variables of volleyball and football players. In flexibility mean value of volleyball players is 19.42 and football players is 14.6. In Endurance mean value of volleyball players is 2128.26 and football players is 2610.32. In agility mean value of volleyball players is 11.36 and football players is 11.06. In explosive strength mean value of volleyball players is 56 and football players is 52. There is significant difference found between the means of selected physical variables

(Flexibility and Endurance) of volleyball and football players, as “t” value required to be significant is 2.021 and calculated value is more compare to tabulated value. There is no significant difference found between the means of selected physical variables (Agility and Explosive Strength) of volleyball and football players, as “t” value required to be significant is 2.021 and calculated value is less compare to tabulated value.

Table-2
COMPARISON OF PHYSIOLOGICAL VARIABLES OF VOLLEYBALL AND FOOTBALL PLAYERS

Components	Group	Mean	S.D.	T
Heart Rate	Volleyball	72	6.12	1.08
	Football	70	5.52	
Vital Capacity	Volleyball	3040	398.52	1.82
	Football	3280	434.66	
Cardio Vascular End.	Volleyball	63	3.38	3.72*
	Football	67	3.42	
Peak Flow Rate	Volleyball	491.64	72.8	0.97
	Football	511.5	54.82	

* Significant at .05 level of significance $t_{(0.05)(38)} = 2.021$

Table 2 shows the comparison of means of selected physiological variables of volleyball and football players. In heart rate mean value of volleyball players is 72 and football players is 70. In vital capacity mean value of volleyball players is 3040 and football players is 3280. In cardio vascular endurance mean value of volleyball players is 63 and football players is 67. In peak flow rate mean value of volleyball players is 491.64 and football players is 511.5. There is significant difference found between the means of only one physiological variable (Cardio Vascular Endurance) of volleyball and football players, as “t” value required to be significant is 2.021 and calculated value is more compare to tabulated value. There is no significant difference found between the means of other selected physiological variables (Heart Rate, Vital Capacity and Peak Flow Rate) of volleyball and football players, as “t” value required to be significant is 2.021 and calculated value is less compare to tabulated value.

Conclusion:

Significant difference found between the means of selected physical (Flexibility and Endurance) and physiological (Cardio Vascular Endurance) variables of volleyball and football players. Mean value indicates that in flexibility and explosive strength volleyball players are better than football players, Mean value indicates that in

endurance and agility football players are better than volleyball players. Mean value indicates that in all physiological variables heart rate, vital capacity, cardio vascular endurance, peak flow rate football players are better than volleyball players. No significant difference found between the means of some of physical (agility and explosive strength) and physiological variables (heart rate, vital capacity and peak flow rate) of volleyball and football players.

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