

COMPARATIVE STUDY OF LEG STRENGTH AMONG COLLEGE LEVEL VOLLEYBALL PLAYERS AND BASKETBALL PLAYERS

Pramod Dalal
Assistant Professor Physical Education
S.B.J Degree College, Bisawar, Hathras (u.p)

Manju Dalal
Assistant Professor Physical Education
R.C.A Girls (p.g) College, Mathura

Introduction

Now a day the physical strength and fitness is a much more effective component in youth, especially in sports like volleyball and basketball. the physical strength especially leg strength is much more important aspect for the performance of good game and playing efficiently. people think that volleyballers having much more leg strength in comparison to basketballers but by the side a one more group think adversely. they said that due to much more jumping involve in the game of basketball, the basketballer having the great leg strength in comparison to volleyballer. therefore to know the scientific and logical conclusions and results we make conduct a comparative leg strength test for the both group players and we conduct a vertical jump test among the groups and the measurements had taken in centimetres. with the help of statistical technique easily we can logically prove that which activity is more dominating in lower leg strength, with the help of such kind of logical and scientific observation we can also suggest and predict that the players or the individuals having ample leg strength can be a good player in which of the activity among those.

Hypothesis

Hypothesis researcher select two types of hypotheses in the selected study 1 is null hypothesis that is there will not be any significant difference between vertical jumps of both group players and another the hypothesis is the alternate hypothesis they may conclude that there will be a significant difference between vertical jump among both different group players.

Level of significance .05.

Criterion measure

In this section Researcher select number of subject, selection of variable, selection of test and selection of equipment.

for the need of present study we just select 10-10 each volleyball as well as basketball players as a subject with the sample size of total 20 subjects so that total sample size n=20.

For the evaluation of leg strength we adapt the vertical jump test and with the help of measuring tape we just mark the point on which hand up to the particular individual for a player is jumped.

Research provides three trials to all the players and out of the three the best trial was considered.

This study is further de limited to the bhadawar vidya mandir college volleyball and basketball male players.

Methodology

Vertical jump test is to be used by the researcher. First of all in the volleyball ground all the subject assembled near the volleyball practice wall and one by one test trial is conducted by the players is jammed and touch the certain point on the wall and making a mark with the help of coloured chalk and after completion of successful jump with the help of volunteers the approaching height is measured.

To know the jumping distance the actual height of tip layer included aam lent is minus from the approaching height to know the exact measurement of the jump.

Statistical technique

To find out the actual significant difference independent 't' test statistical technique was used.

Table-I

groups	N	Mean	Std. Deviation	Std. Error Mean
scores				
volleyballers	10	59.3000	4.13790	1.30852
basketballers	10	57.9000	6.10009	1.92902

Table-II

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Scores Equal variances assumed	1.337	.263	.601	18	.556	1.40000	2.33095	-3.49715	6.29715
Equal variances not assumed			.601	15.835	.557	1.40000	2.33095	-3.54558	6.34558

$P < t$ hence there is no significant difference.

Results

since calculated t value is less than tablet t .0 5 level of significance we may be accepted null hypothesis.

thus it may be concluded that vertical jump performance of both volleyball and basketball group are same.

References:

A.K. Uppal , “Comparative Effects of Two Duration Load Methods and Interval Running Methods on Cardio respiratory Endurance and Selected Physiological Variables,” (Unpublished Doctoral Dissertation, jiwaji University 1980), p. 20.

J.P. Verma, “A Text book on sports statistics” Published by venus publication, 2000.