



A COMPARATIVE STUDY OF JUMPING ABILITY BETWEEN DIFFERENT LEVELS OF CRICKET PLAYERS

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Abstract:

The present study has been designed to investigate the jumping ability between different levels (district, state and national) of cricket players. For accomplish the study total 84 school levels cricket players (28 district, 28 state and 28 national) were randomly selected as sample. All samples were selected from the Haryana. The age of the subjects was ranged from 16-28 years. One-way analysis of variance method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05. We can say that national level players having more leg power comparison of state and district level players.

Keywords: Vertical jump, cricket, District, State, National.

INTRODUCTION

The legs are the primary source of power in many sports. In the vast majority of situations operate within the framework of a closed kinetic chain which means that a leg is always in contact with the ground. Without the functional strength of the leg, the athlete may not have the speed, strength, power or flexibility to perform. We must think of your legs as a functional unit of the entire kinetic chain. "The role is a miraculous and complex combination of systems that are connected and react to one another, to understand the function as a whole, the function of parts and components must be appreciated. "The leg muscles work together to reduce and produce a more effective force for the required activity. The vertical jump test is a common fitness test power leg. The test is usually performed against a wall or similar device to measure the skipped height, but can also test using a synthetic carpet.

PURPOSE OF THE STUDY

The main purpose of the study is to compare the jumping ability of different levels of cricket players.

HYPOTHESIS OF THE STUDY

There would be no difference in jumping ability of different levels of cricket players.

RESEARCH PROCESS AND METHODOLOGY

For this study 84 school level cricket players (28 district, 28 state and 28 national) were selected from Haryana who participated at different levels. The age of the subjects was ranged from 16-28 years.

TOOL AND TECHNIQUES

The investigator collected the jumping ability data though vertical jump test.

STATISTICAL METHOD

The obtained data were analyzed by applying One-way analysis of variance. If there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05.

TABLE 1
JUMPING ABILITY

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	3344.35	2	1672.17	57.53	.000
Within Groups	2354.21	81	29.06		
Total	5698.57	83			

An analysis of table -1 reveals that there is significant difference in jumping ability between district, state and national level players of Haryana. Because significant value is less than level of significance which

is 0.05 since the calculated significance value is found significant, therefore to determine the pair mean difference among the selected different levels LSD post hoc test was computed and its shows in table no 2.

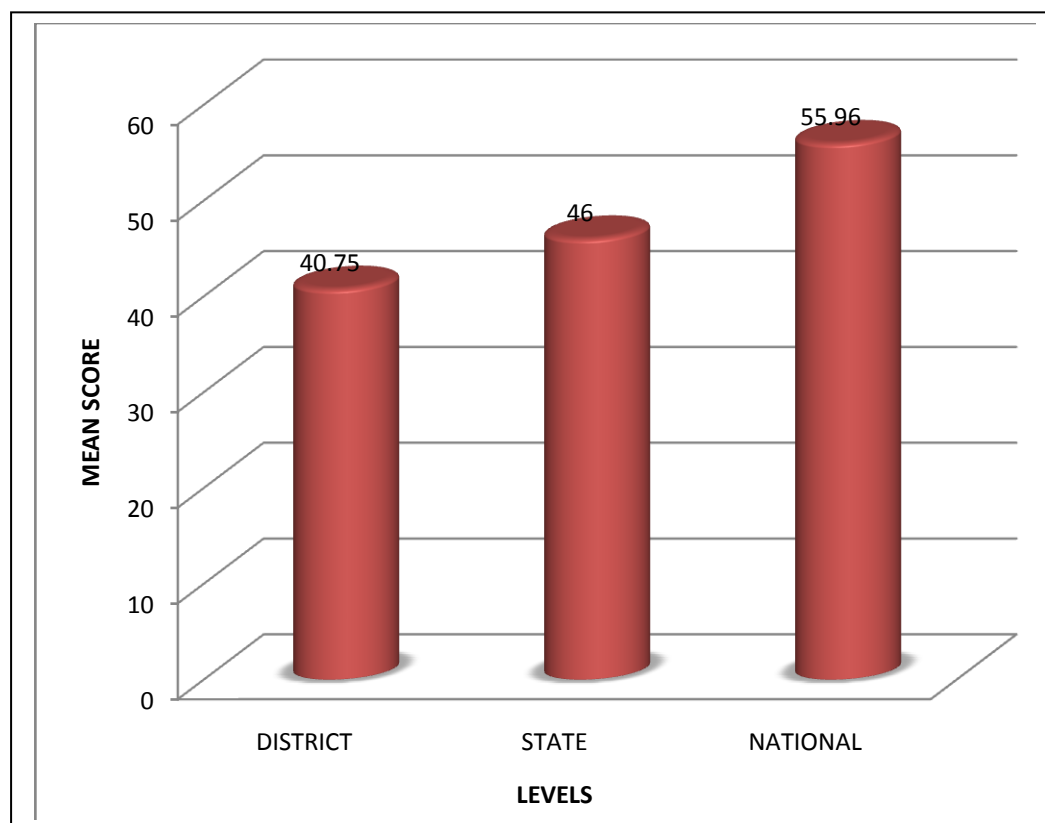
TABLE 2
MEAN DIFFERENCE IN JUMPING ABILITY OF DIFFERENT LEVELS CRICKET PLAYERS IN HARYANA

Grouping Variable		Mean Difference	Std. Error	Sig(p)
DISTRICT	STATE	5.25*	1.44	.000
	NATIONAL	15.21*	1.44	.000
STATE	DISTRICT	5.25*	1.44	.000
	NATIONAL	9.96*	1.44	.000
NATIONAL	DISTRICT	15.21*	1.44	.000
	STATE	9.96*	1.44	.000

The post-hoc test result revealed that there is significant difference in jumping ability of different level players of Haryana. Significant difference was found between the district, state and national level players in their jumping ability. The mean values clearly shows that

national level players having more jumping ability in comparison to state and district level players. The estimated mean value of the players jumping ability is illustrated below in Figure no 1.

FIGURE 1
MEAN DIFFERENCE BETWEEN B.TECH, M.A AND M.SC STUDENTS IN THEIR BODY MASS INDEX



DISCUSSION ON FINDINGS

The findings of the study showed that there was significant difference in the obtained value of jumping ability of different level of cricket players. Jumping ability of national level cricket players are significantly better than the state and district level. While state level players jumping ability is significantly better than the district level players.

CONCLUSION

On the basis of result obtained from the study, following conclusions are drawing:-

1. The data showed that significant difference observed in jumping ability of different level of cricket players in Haryana.
2. Jumping ability of district level players of Haryana is low in comparison of two other levels.

3. We can say that national level players having more leg power comparison of state and district level players.

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