International Journal of Physical Education, Sports and Health 2023; 10(1): 330-331

P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIF): 5.38
IJPESH 2023; 10(1): 330-331

www.kheljournal.com
Received: 23-11-2022
Accepted: 25-12-2022

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Comparison of batsmen and bowlers on fitness variable power

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Abstract
The present study was an attempt to investigate the significant mean difference between Batsmen and Bowlers on fitness variable leg power which are participating at District level. The sample of the study comprised of 20 batsmen and 20 bowlers of Jind district of Haryana state. All the players are male participants and their age ranges from 16 to 19 years. In order to test the significance of mean difference between the variables descriptive statistics was employed. The result indicates that there exists a significance difference between Batsmen and Bowlers on fitness variable power. Batsmen were found to be better than Bowlers on this fitness variable.

Keywords: Power, cricket, players

Introduction
Power
Power is recognized as one of the most basic components of movement. It is the capacity of the individual to bring into play maximum muscle contraction at the fastest possible speed. Power is an explosive action and is equal to the product of force and velocity, where force has to do with muscle strength and velocity with the speed with which strength is used in motor performance. Power is a mechanical principal concerned with propelling the body or projecting its parts in a forceful, explosive manner in the shortest period of time. It is the ability to release maximum muscular force at maximum speed.

METHODOLOGY
For this study the investigator adopted survey method to collect data related to cricket players (batsmen and bowlers).The subjects of the study consist of 40 cricket players i.e. 20 batsmen and 20 bowlers. The age group of cricket players ranges between 16 to 19 years. All these cricket players are male participants and belong to district Jind (Haryana) only.

Tools used
Standing Broad Jump Test
Purpose: To measure Leg Power.

Facilities and Equipments: Ground surface of about 20 feet with marked 'take-off line' at any side and a measuring tape to determine the distance of the jump.

Procedure: The test was explained and demonstrated before the testing commenced. The subject assumed a starting position behind the take-off line, with feet kept parallel and several inches apart and the toes pointed straight ahead. A preliminary movement of bending the knees and swinging the arms backward was allowed, after which the subject jumped outward as far as possible in the pit by swinging the arms forward and the best one was recorded to the nearest centimeter.

Instruction: The players were asked to take off with both feet and to land on both feet simultaneously. They were instructed not to fall backward after the landing crouch before the take-off.

Scoring: Each jump was measured in meters from the take-off point to the nearest point where any part of the body touches the ground surface. The reading of the best jump out of three trails was recorded as the final score.

Validity: The validity, based on a comparison with the composite of 29 tests is.759.

Reliability: This test is considered to be highly reliable, with reliability co-efficient ranging from.83 to.99.

Testing personnel: The help of two trained assistants was taken to supervise the testing station and to measure and record the score.

Findings

The main objective of the study is to compare batsmen and bowlers on fitness variable power. The data collected from cricket players was arranged, tabulated and statistically analyzed. The obtained data was processed for descriptive statistics i.e. Mean, S.D and Z-ratio.

Table 1: The main objective of the study is to compare batsmen and bowlers on fitness variable power

Sr. No.	Variable	Batsmen		Bowlers		Z-ratio
		Mean	S.D	Mean	S.D	
1.	SBJ	2.19	0.19	2.31	0.15	3.306**

**Significant at.01 level of confidence

Table 1 shows the results of mean scores of Standing Broad Jump test of Batsmen and Bowlers which are 2.19 and 2.31 respectively. The Z-ratio of the mean difference is 3.306 in favor of Bowlers. It is significant at.01 level of confidence. Hence, the difference between the mean scores of Batsmen and Bowlers on SBJ test is significant. The mean score of Bowlers is higher than that of Batsmen. It implied that the Bowlers have better leg power as compared to Batsmen. It may be due to their long height and powerful muscle contraction as compare to their counterpart Batsmen. Bowlers have to jump each and every time they bowl and for longer duration especially in test matches. It may be the reason they performed better on fitness variable Leg power as compared to Batsmen.

Discussion of findings

The results suggested that the Bowlers have better leg power than the Batsmen. It Hence, there exist a significance difference between Batsmen and Bowlers on fitness variable power.

Conclusion

Based on the results of the present study the following conclusion is drawn:

There exists a significance difference between Batsmen and Bowlers on fitness variable power. Bowlers were found to be better than Batsmen on this variable.

Implications

The findings of the study have a number of implications for coaches, physical education teachers, trainers and cricket players.

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