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Comparison of cricketers and wrestlers on physical fitness variable endurance

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Abstract

The present study was an attempt to investigate the significant mean difference between cricketers and wrestlers on physical fitness variable endurance which are participating at District level. The sample of the study comprised of 20 cricketers and 20 wrestlers 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 cricketers and wrestlers on physical fitness variable endurance. Cricketers were found to be better than wrestlers on this physical fitness variable.

Keywords: Endurance, cricketers, wrestlers

Introduction

The term "Fitness" is perhaps among the most difficult to define in the area of measurement in physical education. Fitness is that state which characterizes the degree which a person is able to function efficiently, AAPHER (1965). It implies the ability of each person to live most effectively with his potentialities. The term fitness, physical fitness and motor fitness are often used interchangeably, but motor fitness is actually the broader concept, including both physical fitness and motor ability factors (Baumgartner and Jackson, 1991). The physical fitness is the ability to last, to bear up; to withstand stress and to reserve energy to face situations under difficult circumstances where an unfit person would quit. The main components of physical fitness are strength, speed, endurance, flexibility and coordinative abilities.

Endurance

Endurance is the result of a physiological capacity of an individual to sustain movement over a period of time. Endurance is of two kinds. One is associated with strength, whereas the other is associated with circulatory-respiratory systems. However, the two types are related and affect each other. In the first type, associated with strength, the individual with endurance has the ability to continue successive movements in situations where the muscles or muscle groups being used are loaded heavily. The endurance associated with circulatory-respiratory systems, is characterized by a physiological fitness and is related to the phenomenon of "wind". In this instance, exercise is carried on with sufficient duration and intensity to place stress on the heart, circulatory and respiratory systems. There is an adjustment in the circulatory-respiratory systems to prolong action. Such endurance enables the individual to sustain moderate contraction of the skeletal muscles over a relatively long period of time.

Methodology

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

Tools used

12-Minute Run walk Test

Purpose

To measure Endurance.

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Facilities and Equipment’s

A 400 m athletic track, a stopwatch, a scoreboard and a whistle

Procedure

The test was explained before the testing commenced. The subject assumed a standing start position behind the starting line. On the signal “Go” the subjects started running. The laps were counted and at the end of 12 minute a long whistle was blown and all the subjects stopped at their respective places and their distances were recorded.

Instruction

Subjects were not allowed to cut short on the track. The test required continuous running and walking. No subject was allowed to stop before 12 minute. All the subjects were supposed to stop at their respective places on long whistles.

Scoring

The distance covered by the subjects was recorded in kilometers. The distance recorded was the completed laps plus distance covered after the finish line.

Validity: Validity coefficient of the test is .90.

Reliability

The reliability co-efficient is between .90and .94.

Testing personnel: The help of one trained person was taken to administer this test.

Findings

The main objective of the study is to compare cricketers and wrestlers on physical fitness variable endurance. The data collected from cricketers and wrestlers 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 obtained data was processed for descriptive statistics

Sr. No.	Variable	Batsmen		Bowlers		Z-ratio
		Mean	S.D	Mean	S.D	
1.	12 Min Run Walk	2.62	0.3	2.48	0.28	2.435*

*Significant at .05 level of confidence

Table 1 depicts the mean scores of 12 Min Run Walk test of cricketers and wrestlers which are 2.62 and 2.48 respectively. The Z-ratio of the mean difference is 2.435 in favor of cricketers which is significant at .05 level of confidence. Hence, the difference between the mean scores of cricketers and wrestlers on 12 Min Run Walk test is found to be significant. The mean score of cricketers is higher than that of wrestlers. It implied that the cricketers have better endurance ability as compared to wrestlers. It may be due to the long duration of cricket matches like 3 hours in T-20, 7 hours in one day match and 5 days in test matches and continuously running during fielding, bowling and batting but such type of movements are not performed by players of wrestling and the duration of play is also very short.

Discussion of findings

The results suggested that the cricketers have better endurance ability than the wrestlers. It Hence, there exist a

significance difference between cricketers and wrestlers on physical fitness variable endurance.

Conclusion

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

There exists a significance difference between cricketers and wrestlers on physical fitness variable endurance. Cricketers were found to be better than wrestlers on this physical fitness 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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