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COMPARISON OF SPEED AND CARDIO RESPIRATORY ENDURANCE BETWEEN THE FINALISTS OF INTER ZONE INTER COLLEGIATE CRICKET TOURNAMENT

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Abstract:

The purpose of the study was to compare the speed and cardio respiratory endurance between Finalists of [Winners and Runner-Up] in Inter Zone Inter Collegiate Cricket Tournament. To achieve this purpose of the study, twenty men Cricket players representing colleges Zone Inter Collegiate Cricket Tournament held at Dharmapuri District were selected as subjects at random. Among the physical variables, the following variables namely speed and cardio respiratory endurance were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using standard tests. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate. The results of the study showed that there was no significant difference between Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on speed and cardio respiratory endurance.

Key Words: Winners and Runner-Up, Speed, Cardio Respiratory Endurance, Inter Collegiate Men Cricket Players

Introduction:

Speed and cardiorespiratory endurance are two fundamental components of physical fitness that significantly influence performance in intercollegiate men cricket players. Although cricket is traditionally viewed as a skill-dominant game, the modern format demands high levels of physical preparedness due to increased match intensity, rapid game transitions, and tighter competitive schedules. Speed, defined as the ability to move the body or its parts swiftly from one point to another in the shortest possible time, plays a decisive role in batting, bowling, and fielding. Batsmen require sprinting speed for quick singles, doubles, and converting runs under pressure. Bowlers depend on approach run speed to generate momentum and enhance ball velocity, while fielders rely heavily on acceleration and sprinting ability to chase balls, prevent boundaries, and execute quick run-outs. Therefore, the development of linear speed and acceleration capacity is essential for improving overall match efficiency and competitive success at the intercollegiate level.

Cardiorespiratory endurance, on the other hand, refers to the ability of the heart, lungs, and circulatory system to supply oxygen to working muscles during prolonged physical activity. Cricket matches, particularly multi-day and limited-overs formats, require sustained physical effort, repeated sprinting, and prolonged periods of concentration. A well-developed cardiorespiratory system enables players to maintain optimal performance throughout extended innings, recover quickly between high-intensity efforts, and resist fatigue during long spells of bowling or continuous fielding. Enhanced aerobic capacity also supports faster recovery between matches, reduces the risk of overtraining, and contributes to overall physiological efficiency. For intercollegiate men cricket players, who often compete in demanding tournament schedules, the integration of structured training programmes aimed at improving speed and cardiorespiratory endurance is vital for achieving consistent and high-level performance.

Fast acceleration over short distances (5-30 metres) enables players to respond quickly to match situations, whether it is chasing the ball in the outfield, executing a quick run-out, or reacting to a fast delivery while batting. Similarly, bowlers require speed and repeated sprint ability to maintain performance across long spells, while fielders depend on agility and sprint speed to cover large areas efficiently.

Cardiorespiratory endurance is equally important, as cricket matches especially multi-day and limited-overs formats can last for several hours, requiring sustained physical and mental effort. A well-developed aerobic system helps players maintain consistent performance levels, delay fatigue, and recover quickly between overs, sprints, and high-intensity efforts. Enhanced cardiorespiratory endurance improves oxygen delivery to working muscles, supports faster recovery between bouts of activity, and enables players to sustain concentration and technical efficiency throughout the game. For intercollegiate men cricket players, who often compete in congested tournament schedules, the development of speed and cardiorespiratory endurance is crucial not only for peak performance but also for injury prevention and overall match consistency.

Methodology:

The purpose of the study was to compare the speed and cardio respiratory endurance between Finalists of [Winners and Runner-Up] in Inter Zone Inter Collegiate Cricket Tournament. To achieve this purpose of the study, twenty men Cricket players representing colleges Zone Inter Collegiate Cricket Tournament held at Dharmapuri District were selected as subjects at random. Among the physical variables, the following variables namely speed and cardio respiratory endurance were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using standard tests. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate.

Analysis of the Data:

Speed:

The mean, standard deviation and 't' ratio values on speed of Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament have been analyzed and presented in table 1.

Table 1: The Mean, Standard Deviation and 't' Ratio Values Between Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on Speed

Groups	Mean	Standard Deviation	't' Ratio Value
Winners	8.15	0.69	0.253
Runner-Up	8.23	0.72	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 18 was 1.73).

The table 1 shows that the mean values on speed for Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament were 8.15 and 8.23 respectively. The obtained 't' ratio value on speed0.253 which was lesser than the table value required for significance with df 18 was 1.73.

The results of the study showed that there was no significant difference between university men Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on speed.

Cardio Respiratory Endurance:

The mean, standard deviation and 't' ratio values on cardio respiratory endurance of Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament have been analyzed and presented in table 2.

Table 2: The Mean, Standard Deviation and 't' Ratio Values Between Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on Cardio Respiratory Endurance

Groups	Mean	Standard Deviation	't' Ratio Value
Winners	1452.35	52.36	0.479
Runner-Up	1441.18	51.84	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 18 was 1.73).

The table 2 shows that the mean values on cardio respiratory endurance for Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament were 1452.35 and 1441.18 respectively. The obtained 't' ratio value on cardio respiratory endurance0.479 which was lesser than the table value required for significance with df 18 was 1.73.

The results of the study showed that there was no significant difference between university men Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on cardio respiratory endurance.

Conclusions:

- There was no significant difference between Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on speed.
- There was no significant difference between Winners and Runner-Up in Inter Zone Inter Collegiate Cricket Tournament on cardio respiratory endurance.

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