

**Comparison on selected Anthropometric Measurement, Physical Fitness Among Cricket Players of Kalaburgi and Raichur District**

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**Introduction**

Specific anthropometric characteristics are needed to be successful in certain sporting events. It is also important to note that there are some differences in body structure and composition of sports persons involved in individual and team sports. The tasks in some events, such as shot put or high jump, are quite specific and different from each other and so are the successful physiques. This process whereby the physical demands of a sport lead to selection of body types best suited to that sport is known as “morphological optimization” (Bloomfield et al., 1995).

The identification of physical characteristics in a sport modality contributes to its success and enables to spot differences among athletes of different modalities, which is of great interest for both sport coaches and scientists.

Sports performance is based in a complex and intricate diversity of variables, which include physical (general and specific conditions), psychological (personality and motivation) and body (body morphology, anthropometry and body composition) factors. The relationship between morphological variables and sports performance is the object of study of anthropometry and is an important element to be analyzed.

**Objectives of the Study:**

- To study and make selected anthropometric measurements profile of Hyderabad Karnataka U-16 and U-19 Cricket players.
- To analyze the anthropometric measurements of six districts U-16 and U-19 cricket players of Hyderabad Karnataka region.

**Hypotheses of the Study:**

- The study would make the selected anthropometric measurements profile of Kalaburgi and raichur U-16 and U-19 Cricket players.
- The study would analyze the selected anthropometric measurements of two districts U-16 and U-19 cricket players of Kalaburgi and raichur.

**Selection of Subjects and Sample Design:**

To achieve the purpose of the study total 60 cricket players (U- 16 & U-19) were selected randomly from two districts of Kalaburgi and raichur they are presented in the following sample design table.

**Sample Design:**

**Cricket Players (u-16,u-19 players)**

Name Of the district	Samples
Kalaburgi	30
Raichur	30
Total	60

Each sport demands specific requirement of physical parameters for successful performance, the importance of physical parameters likes in the fact that in majority of the sports; it scores as the basis for good performance. The selected anthropometric measurements like body weight, height, shoulder girth, total arm length and total leg length were selected.

**Selection of Tests:**

- To measure the selected variables the respective tests are
- Administered and represented in the table 1.

**Table. 1**

S.NO	VAIRABLES	TEST AND EQUIPMENTS
1	Anthropometric measurement	Height and Weight (Weighing Machine and Stadiometer), Steel measuring tape (shoulder girth, total arm length and total leg length).

**Instrument Reliability:**

In the present study standard equipments such as weighing machine, stadiometer and steel measuring tape which are available in the laboratory, Department of Physical Education Gulbarga University, Kalaburagi were used.

**Test Administration:**

The researcher does pilot approach to the places of two districts of Gulbarga and raichur where the district U-16 and U-19 cricket tournaments were organized. The researcher was collected the data related to present study in the following methods,

**a) Measurement of Height:**

- Purpose to measure the maximum height.
- Equipment Used: Stadiometer.

**Physical fitness test**

**50 Meter Dash Test :**

The aim of this test is to determine acceleration and speed, Equipment required measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 50meters.

**Scoring:** The test involves running a single maximum sprint over 50 meters, with the time recorded.

**Analysis of Data and Interpretation of Results**

The analysis of data and interpretation is done based on the statistical results and findings of the present study. Further the levels and comparisons on the variable like body mass index (BMI), arm length, leg length and shoulder girth and performances of two districts U-16 and U-19cricket players of Gulbarga and raichur district were discussed as per the findings of the study in the following steps,

- The comparisons (paired t-test) on selected anthropometric measurements among six districts U-16,U-19 cricket players of Gulbarga and raichur district.
- The comparisons (paired t-test) on physical fitness performances among two districts U-16,U-19 cricket players of Gulbarga and raichur district

**Interpretation of Results:**

**The comparisons (paired t-test) on (anthropometric test) height between Raichur, Kalaburagi, districts U-16, U-19 cricket players.**

**Table.no.1**

s.no	Groups	Mean	Numbers	S.D.Deviation	T-value
1	Kalabirgi	39.18	30	1.63	0.74
2	Raichur	38.16	30	1.64	

**The comparisons (paired t-test) on (physical fitness test) speed test between Raichur, Kalaburagi, and districts U-16, U-19 cricket players.**

s.no	Groups	Mean	Numbers	S.D.Deviation	T-value
1	Kalabirgi	35.18	30	1.84	1.24
2	Raichur	36.16	30	1.90	

**Analysis of Data and Interpretation of Results:**

The analysis of data and interpretation is done based on the stastical results and findings. Further the results are discussed as per the following steps,

1. Analysis of 50 meter dash test among cricket players U-16,U-19 of Kalaburagi, Raichur, district.
2. Analysis of hieght among. Cricket players U-16,U-19 of Kalaburagi, Raichur, district.

**Conclusion:**

- The Kalaburagi, Raichur districts U-16, U-19 cricket players fall under ‘Normal hieght’ category according to standard norms.
- The Kalaburagi, Raichur, districtsU-16 U-19 cricket players fall under ‘speed ’ category according to standard norms. Further, it is concluded that average value of two districts cricket players fall under ‘speed’ category according to standard norms.

**Recommendations :**

- It is recommended that based on the study results coaches and trainers can prepare scientific training programmers for better performance of Basket ball players and Hand ball players in the Hyderabad Karnataka region
- The data and results can be utilized by concerned basket ball and hand ball federation / association of Karnataka and India in general for talent identification in Hyderabad

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