



## ANALYSIS OF MOTOR EDUCABILITY AMONG CRICKET PLAYERS OF DIFFERENT LEVEL OF ACHIEVEMENT

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### **Abstract:**

The aim of this study was to determine the role of motor educability among cricket players of different level of achievement. To obtain data, the investigators had selected, fifty (N=50), Male State and National Level Cricket Players between the age group of 21-25 years were selected for the purpose of present study. The subjects were purposively assigned into three groups: Group-A: State Level Cricket Players ( $n_1=25$ ); Group-B: National Level Cricket Players ( $n_2=25$ ). The difference in the mean of each group for selected variable was tested by "t" test. The level of significance was set at 0.05. It is concluded from the above findings that significant differences were found among state and national level cricket players on the sub-variables; front roll, back roll, jumping half-turns and jumping full-turns.

**Keywords:** motor educability, Front Roll, Back Roll, Jumping Half-Turns, jumping full-Turns

### **1. Introduction**

Cricket is the most popular sport in commonwealth countries and one of the most popular sports in the world. The performance of cricket players is enhancing day by day, old records are broken and new records are forming; scores are reaching new heights, it is due to high intensity training of the players which help them to perform well. Today is the modern competitive cricket era. Every cricketer is in race to excel others, and cricket competitions have become fundamental mode of human expressions

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as they are one of the very important functions by which national and international recognition and prestige is gained.

Games of cricket, batting and bowling require a unique set of skills, and these are popular sports in several Western countries. Common exercises involved with cricket, batting and bowling include standing for long periods of time, bending, stooping and squatting. These exercises can burn a significant number of calories per hour and are a low to moderate-paced fitness activity. Anthropometry, Physical Fitness, and Physiological profiles play an important role in performance in various Sports and Games. Some games may not be affected by physique, physiological Profile or Physical fitness but they may be much affected by psychological Status such as Chess.

The motor educability is generally defined as “The ability to learn well different motor skills quickly and easily”. In other words, motor educability refers to one’s level of ease with which one learns new motor skills. As in intelligence testing in education, so is motor educability testing (Motor intelligence) in physical education. Although, the validity of motor educability tests at their ability to predict motor skill learning has not been established, yet a large number of motor educability test batteries have been published. Motor educability is the capacity obtained from a general motor skill underlining a good presentation level. This fundamental motor ability is determined by genetic factor, and stimulation from environment which is introduced early. Concept of General Motor Ability (GMA) and General Motor Educability (GME) is included in Intelligence Quotient (IQ). This means that Motor Educability is the ability to learn motor skills easily and quickly (Mc Cloy & Young, 1954). Thus, the relevance between ability of students in learning a new motor skill with a degree of motor educability is similar to the interrelation between student’s intelligence and his success in learning the subject materials.

## **2. Selection of Subjects**

For the purpose of present study, Fifty (N=50), Male State and National Level Cricket Players between the age group of 21-25 years were selected for the purpose of present study. The subjects were purposively assigned into three groups: Group-A: State Level Cricket Players (n1=250); Group-B: National Level Cricket Players (n2=25).

## **3. Selection of Variables**

A feasibility analysis as to which of the variables/skills could be taken up for the investigation, keeping in view the availability of tools, adequacy to the subjects and the

legitimate time that could be devoted for tests and to keep the entire study unitary and integrated was made in consultation with experts. With the above criteria's in mind, the following motor educability was selected for the present study:

#### 4. Motor Educability

- Front Roll;
- Back Roll;
- Jumping Half-Turns;
- Jumping Full-Turns.



**A. Front Roll**

**B. Back Roll**

**C. Jumping Half-Turns**

**D. Jumping full-Turns**

#### 4.1 Statistical Technique Employed

Student's t-test for independent data was used to assess the between-group differences. The level of  $p \leq 0.05$  was considered significant.

#### 5. Results

The results pertaining to significant difference, if any, between State Level and National Level cricket players were assessed using the Student's t test and the results are presented in Table 1:

**Table 1:** Mean, Standard Deviation, and t-value of State Level and National Level cricket players with regard to Motor Educability sub-parameter: Front Roll, Back Roll, Jumping Half Turn and Jumping Full Turn

Motor Educability Sub-Parameter	Mean		SD		t-value
	State Level	National Level	State Level	National Level	
Front Roll	7.24	8.12	1.56	1.30	2.16
Back Roll	5.36	6.16	1.50	1.49	1.89
Jumping Half-Turns	6.24	7.28	1.76	1.51	2.24
Jumping Full-Turns	6.48	7.36	1.45	1.89	1.85

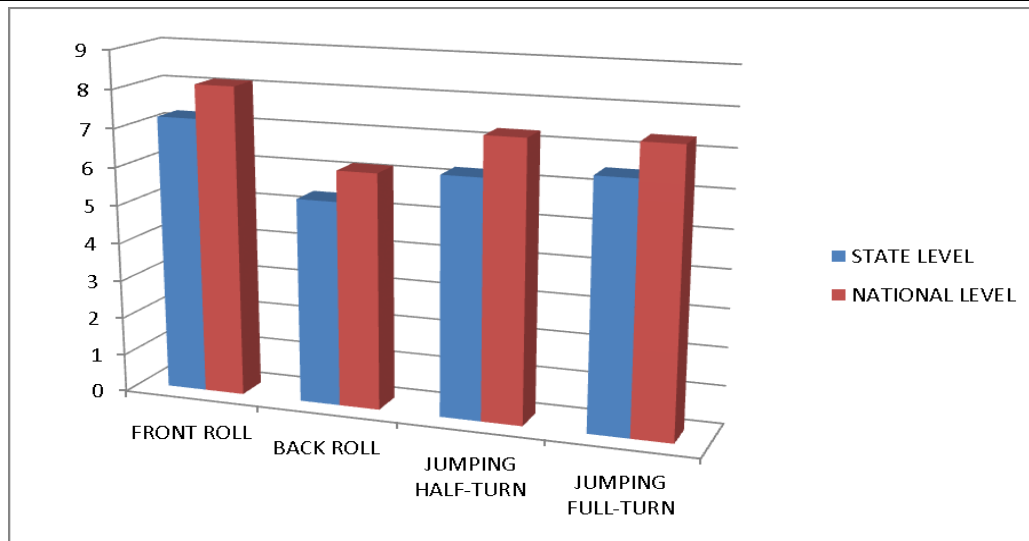
\*Significant at 0.05 level

It is observed from the Table-1 that mean value of State Level and National Level cricket players for variable Front Roll was 7.24 and 8.12 respectively, whereas the standard deviation (SD) was 1.56 and 1.30. The critical value of t at 95% probability level is lower (1.70) than the observed value of t (2.16). The data does indicated that the difference between State Level and National Level cricket players for variable Front Roll are significant.

It is observed from the Table-1 that mean value of State Level and National Level cricket players for variable Back Roll was 5.36 and 6.16 respectively, whereas the standard deviation (SD) was 1.50 and 1.49. The critical value of t at 95% probability level is lower (1.70) than the observed value of t (1.89). The data does indicated that the difference between State Level and National Level cricket players for variable Roll are significant.

It is observed from the Table-1 that mean value of State Level and National Level cricket players for variable Jumping Half-Turns was 6.24 and 7.28 respectively, whereas the standard deviation (SD) was 1.76 and 1.51. The critical value of t at 95% probability level is lower (1.70) than the observed value of t (2.24). The data does indicated that the difference between State Level and National Level cricket players for variable Jumping Half-Turns are significant.

It is observed from the Table-1 that mean value of State Level and National Level cricket players for variable Jumping Full-Turns was 6.48 and 7.36 respectively, whereas the standard deviation (SD) was 1.45 and 1.89. The critical value of t at 95% probability level is lower (1.70) than the observed value of t (1.85). The data does indicated that the difference between State Level and National Level cricket players for variable Jumping Full-Turns are significant.



**Figure 1:** Graphical representation of mean scores with regard to Motor Educability between State and National level Cricket players on the sub-parameter Front Roll, Back Roll, Jumping Half-Turn and Jumping Full-Turn

## 6. Conclusions of the Study

Based on the findings of this study, the following conclusions were drawn: It is concluded from the above findings that significant differences were found between state and national level cricket players on the sub-variables; Front Roll, Back Roll, Jumping Half-Turns and Jumping full-Turns.

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