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Mohd. Sameer Khan

Research Scholar, School of
Physical Education, D.A.V.V.,
Indore, Madhya Pradesh, India

Dr. Deepak Mehta

Professor, school of physical
education, DAVV, Indore,
Madhya Pradesh, India

A comparative study of psychomotor variable among under-19 and above-19 cricket players of Madhya Pradesh

Mohd. Sameer Khan and Dr. Deepak Mehta

Abstract

Introduction: Psychomotor ability refers to a wide range of actions involving physical movement related to conscious cognitive processing. Psychomotor ability may be measured by accuracy or speed (reaction time). Thirty (30) players were taken as subject for the study, fifteen (15) from under-19 batsman and fifteen (15) from above-19 batsman of Madhya Pradesh. The age group was 14 to 35 years. O'Connor Finger Dexterity Test was employed to collect the data regarding the Psychomotor Abilities. To find out the comparison of Psychomotor Variable between the under-19 and above-19 cricket players of Madhya Pradesh "t" test was applied in statistical procedure.

Objectives of the study: The objective of the study was to find out the comparison of psychomotor variable between the under-19 and above-19 cricket players of Madhya Pradesh.

Materials and Methods: Thirty (30) players were taken as subject for the study, fifteen (15) from under-19 batsman and fifteen (15) from above-19 batsman who participated at national level of Madhya Pradesh. To assess the psychomotor variable of the subjects measured by O'Connor finger dexterity test to measure the finger dexterity.

Results: Under-19 cricket players were having grater mean (1.9 ± 0.35) in comparison to above-19 cricket players (1.7 ± 0.37).

Conclusions: 1) Significant difference was not found between under-19 and above-19 cricket players of Madhya Pradesh. 2) Under-19 and Above-19 batsman, cricket player having similar mean in comparison with O'Connor finger dexterity test.

Keywords: Psychomotor variable, cricket and national level

Introduction

Cricket is defined as "a bat and ball, team game played during the summer in the British Isles and in several countries influenced by the British, such as Australia, New Zealand, India, Pakistan, South Africa, and ^[1] West Indian nations". Cricket is played between two teams of 11 players on a grassy field, in the center of which are two wickets. Cricket is the most popular sport in India; it is played by many people in open spaces throughout the country though it is not the nation's official national sport. Cricket requires a variety of skills that are commonly used in a number of sports. Hand-eye coordination, throwing or catching a ball, balance and intense, long-term concentration are just a few. Through consistent practice and by applying these skills to the elements of cricket, such as a batsman watching the ball at all times, you will see a dramatic improvement in your game. In cricket many skills that can be execute the performance like bowling, batting, fielding, catching, throwing, wicket keeping all eleven players on the fielding side take the field together ^[2].

Psychomotor ability refers to a wide range of actions involving physical movement related to conscious cognitive processing. Psychomotor ability may be measured by accuracy or speed (reaction time). Examples of psychomotor tests include the Grooved Pegboard test, and the Purdue Pegboard test that measure visual-motor coordination. The Finger Tapping test requires study participants to place their dominant hand face-down and tap as quickly as possible.

Corresponding Author:

Mohd. Sameer Khan

Research Scholar, School of
Physical Education, D.A.V.V.,
Indore, Madhya Pradesh, India

¹ <http://oaji.net/articles/2015/1174-1434192383.pdf>

² <https://library.neura.edu.au/schizophrenia/signs-and-symptoms/cognition/psychomotor-ability/>

The task is repeated with the non-dominant hand and assesses motor speed, manual dexterity and lateralization. The Digit Symbol Substitution test involves paired numbers and symbols. Participants are shown several numbers and asked to write the missing corresponding symbols as quickly as possible, measuring motor ability and attention. The Pursuit Rotor Motor task presents participants with a turntable with a dot in the centre that they must hold with a flexible metal wand as the turntable spins, measuring motor coordination and learning. The Star Mirror Tracing task asks participants to trace a star while only looking at their hand in the reflection of a mirror, assessing visual-motor learning.

Objectives of the study

The objective of the study was to find out the comparison of psychomotor variable between the under-19 and above-19 cricket players of Madhya Pradesh

Material and Methods

Subjects In order to conduct this study, the Thirty (30) players were taken as subject for the study, fifteen (15) from under-19 batsman and fifteen (15) from above-19 batsman who participated at National level of Madhya Pradesh. The ages of the subjects were between 14-35 years were purposive selected as subjects. The psychomotor ability was measured by O'Connor finger dexterity test.

Results, Discussion and Conclusions

The statistical analysis of data has been presented in this chapter. The psychomotor ability data was collected on total 30 batsman male, 15 from under-19 batsman and 15 from above-19 batsman of Madhya Pradesh. To characterize and

compare of psychomotor variable between the under-19 and above-19 cricket players of Madhya Pradesh. Descriptive and t-test was used. Data pertaining to that have been presented in Table -1.

Table 1: Mean and Standard Deviation of Psychomotor Variable between the Under-19 and Above-19 Cricket Players of Madhya Pradesh. (N=30)

Psychomotor Variable	Category	Mean	Std. Deviation
O'Connor Finger Dexterity	Under -19	1.9	0.35
	Above - 19	1.7	0.37

Table-1 reveals that under-19 cricket players were having grater mean (1.9±0.35) in comparison to above-19 cricket players (1.7±0.37). (Fig. 1)

Table 2: A Significance of difference of Mean in Under-19 and Above-19 Cricket Players of Madhya Pradesh

Group	Mean	Mean Difference	t- ratio
Under -19	1.9	0.2	0.19
Above - 19	1.7		

*significant at .05 level.
 "t".05 (28) = 2.048

Table – 2 reveals that there was no significant difference was found between under-19 and above-19 cricket players of Madhya Pradesh because calculated t value (0.19) was smaller than the tabulated (2.048) at 0.05 level of significance. This table was presented in Figure 1 below:

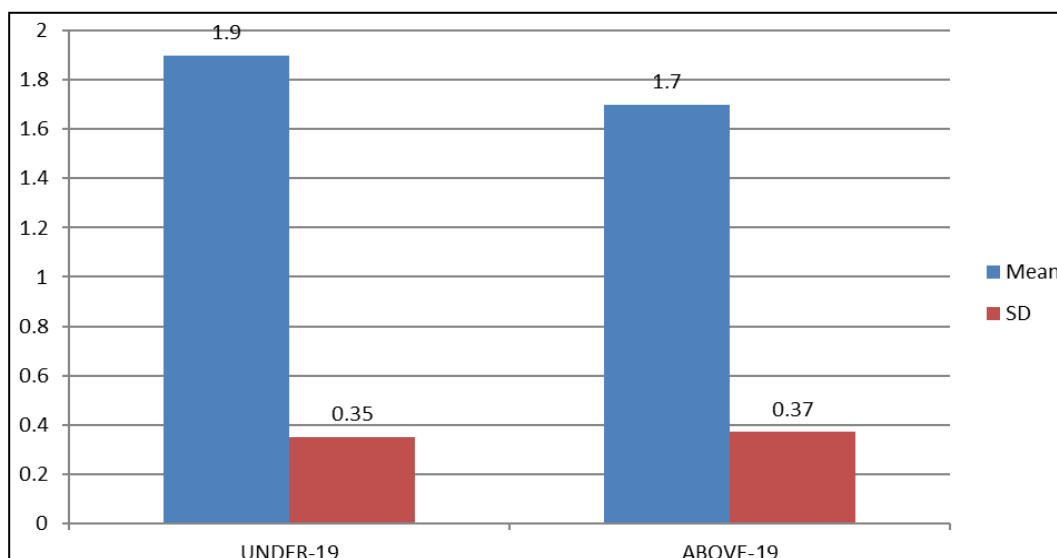


Fig 1: Mean of Explosive Leg Strength between Basketball and Volleyball players of DAVV, Indore

Discussion of Findings

The present study reveals that there was no significant difference was found between under-19 and above-19 cricket players of Madhya Pradesh. Both group's under-19 and above-19 batsman, cricket player having similar mean because their accuracy of hand and finger movements under controlled conditions.

Conclusions

1. Significant difference was not found between under-19 and above-19 cricket players of Madhya Pradesh.
2. Under-19 and Above-19 batsman, cricket player having

similar mean in comparison with O'Connor finger dexterity test.

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