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Comparison of Psychomotor Indices of different Level Male Cricketers

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Abstract

The objective of the study to compare psychomotor indices of three different level male cricketers. Such as University level cricketer. Total seventy five male cricketers were selected for the study from different levels (i.e. University Level, Club Level & District Level). The data obtained for Visuo- Spatial Co-Ordination, Psychomotor Mobilization, Visuo-Motor Co-Ordination, Eye-Leg Co-Ordination, Eye-Hand Co-Ordination, Kinesthetic Perception and Reaction Time. The essential descriptive statistics was used. One way analysis of variance (ANOVA) was used to compare psychomotor indices among cricketers.The post hoc-test (LSD) was applied in order to investigate the significant differences In all the statistical tests, the level of significance was 0.05 and if the calculated P-value was less than 0.05, there exists statistically significant mean difference between the groups.

Key Words: Psychomotor, Cricketers, Co-Ordination, Kinesthetic Perception & Reaction Time.

1. Introduction:

In modern glamorous sports environment physical fitness study has significant importance because good fitness has highly value at sports performance. Recent research suggests that game of cricket has tremendous popularity in media and publics Cricket is the most watched sports in India. It is also noted that psychomotor abilities is also significant relation with body image as both are the significant components of a glamorous sports like cricket. The psychomotor domain (Simpson, 1972) includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures or techniques in execution. Thus, psychomotor skills rage from manual tasks, such as digging a ditch or washing a car, to more complex tasks, such as operating a complex piece of machinery or dancing. The game cricket is very dynamic sports. Maximum movement of the skills is based on psycho motor movement. So present study done on "Comparison of multidimensional body image profile of male cricketer's.

1.1. Objectives of the Study:

To compare psychomotor indices of three different level male cricketers'. Such as University level cricketer, Club level cricketers and District level cricketers.

1.2. Hypothesis:

It is hypothesized that there would be no significant difference in psychomotor indices among male cricket players at different levels.

2. Materials & Methods:

2.1 Selection of Subject:

Total seventy five male cricketers were selected for the study from different levels (i.e. University Level, Club Level & District Level).

2.2 Selection of Variables:

There are following psychomotor indices:

a) Visuo- Spatial Co-Ordination
b) Psychomotor Mobilization
c) Visuo-Motor Co-Ordination
d) Eye-Leg Co-Ordination
e) Eye-Hand Co-Ordination
f) Kinesthetic Perception
e) Reaction Time

2.3 Criterion Measures:

- The Visuo-Spatial Co-Ordination will be measured by Standing Broad Jump.
- The Psychomotor Mobilization will be measured by Skipping Rope Jump.
- Visuo-Motor Co-Ordination will be measured by Bready Wall Volley test.
- The Eye-Leg Co-Ordination will be measured by Mc Donald Soccer test.
- The Eye-Hand Co-Ordination will be measured by LSU Basketball Passing test.
- The Kinesthetic Perception will be measured by Distance Perception Jump test.
- The Reaction Time will be measured by Nelson Hand Reaction test.

2.4 Design of the study:

In the present study simple random sampling technique was used; in which male athletes from three levels of crickets was compared separately.

2.5 Statistical Procedure:

The essential descriptive statistics was used. One way analysis of variance (ANOVA) was used to compare psychomotor indices among cricketers. The post hoc-test (LSD) was applied in order to investigate the significant differences In all the statistical tests, the level of significance was 0.05 and if the calculated P-value was less than 0.05, there exists statistically significant mean difference between the groups.

3. Result of the Study:

Table: 1

Mean, Std. Deviation, Analysis of Variance (ANOVA) of University, Club and District Level Male Cricketers with Regard to Visuo Spatial Coordination, Psychomotor Mobilization, Visuo Motor Coordination (Psychomotor Indices).

Psychomotor indices	University	Club	District	ANOVA F-ratio	P-value <0.05	LSD = P-value<0.05
Visuo Spatial Coordination	ME-2.43 SD-0.27	ME-2.15 SD-0.52	ME-2.07 SD-0.47	4.45*	.015	University cricketer significantly higher
Psychomotor Mobilization	ME-61.56 SD-20.31	ME-51.21 SD-13.83	ME-51.48 SD-08.22	3.87*	.025	University cricketer significantly higher
Visuo Motor Coordination	ME-12.50 SD-8.03	ME-18.26 SD-11.26	ME-19.86 SD-12.88	3.14*	.049	District cricketer significantly higher

***Significant at 0.05 level of significance F05 (2, 72) =3.13**

Table: 2

Mean, Std. Deviation, Analysis of Variance (ANOVA) of University, Club and District Level Male Cricketers with Regard to Eye Leg coordination, Eye Hand Coordination, Kinesthetic Perception, Reaction Time (Psychomotor Indices).

Psychomotor indices	University	Club	District	ANOVA F-ratio	P-value <0.05	LSD = P-value<0.05
Eye Leg Coordination	ME-15.24 SD-3.33	ME-17.56 SD-3.40	ME-17.16 SD-3.03	3.61*	.032	Club cricketer significantly higher
Eye Hand Coordination	ME-44.68 SD_8.75	ME-50.12 SD-7.40	ME-44.40 SD-9.10	3.622	.032	Club cricketer significantly higher
Kinesthetic Perception	ME-22.99 SD-10.02	ME-17.49 SD-6.34	ME-18.36 SD-7.26	3.38*	.039	Club cricketer significantly higher
Reaction Time	ME-2.08 SD-1.21	ME-1.43 SD-0.58	ME-1.4988 SD-0.37	4.83*	.011	Club cricketer significantly higher

***Significant at 0.05 level of significance F05 (2, 72) =3.13**

Figure-01:
Graphical Representation of Mean and SD scores with regards to university, club &District Level Male Cricketers on Psychomotor Indices

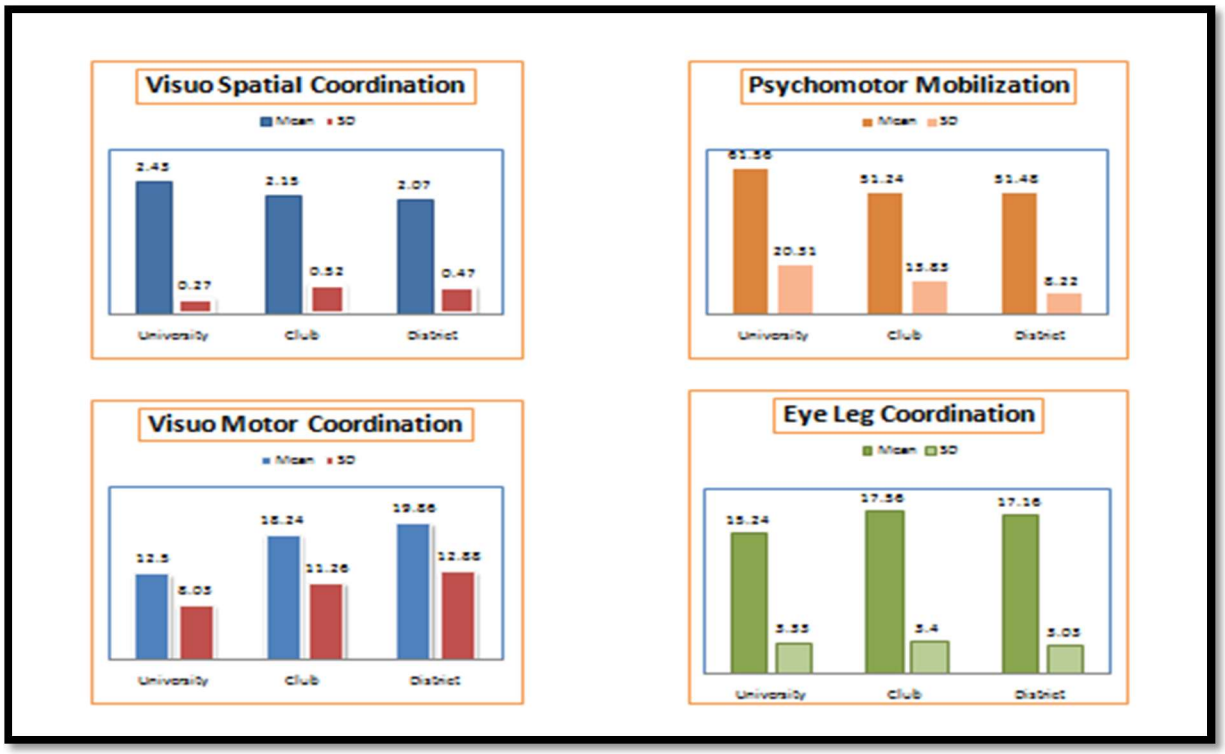

Figure-02:
Graphical Representation of Mean and SD scores with regards to university, club &District Level Male Cricketer on Psychomotor Indices

4. Conclusion:

- There was significant difference in psychomotor indices of university, club and district level male cricketers.
- University level male cricketers were found to be higher in visuospatial coordination and psychomotor mobilization than their counterpart club and district level.
- Club level male cricketers were found to be higher eye leg coordination eye hand coordination, kinesthetic perception, and reaction time than their counter parts university and district level.
- In one case, District level cricketers were found to be higher visuomotor coordination than their counter part university and club level.

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