



## Effect of Motor Educability and Tribal and Non Tribal Belongingness on Physical Skills of Male Players

A.Y. Karkare

Rani Laxmibai Girls College, Sawargaon, Dist. Nagpur MS, INDIA

Available online at: [www.isca.in](http://www.isca.in), [www.isca.me](http://www.isca.me)

Received 21<sup>st</sup> November 2014, revised 13<sup>th</sup> January 2015, accepted 23<sup>rd</sup> February 2015

### Abstract

*The purpose of the present study was to see the effect of motor educability and tribal, non tribal belongingness on physical skills of male players. To conduct the study 200 tribal boys player and 200 non-tribal players were selected as a sample from different areas of Vidarbha region of Maharashtra state. Thus total 400 samples were selected for the proposed research work. The age group of the sample ranged between 13 to 18 years. To measure motor educability of samples Metheny Johnson test was used. To find out the physical skill of tribal and non tribal players physical skill test prepared by B. Johnson was used. This test is highly valid and reliable for the school going students. Result found that, effects of motor educability upon physical skill of male players have found to be statistically significant. The main effect of tribal-non tribal belongingness also found statistically significant. The interaction effects of motor educability and tribal-non-tribal belongingness on physical skill of male players have able to show their influence.*

**Keywords:** Motor Educability, Tribal, physical skills of male players.

### Introduction

The motor educability is generally defined as “The ability to learn well different motor skills quickly and easily”<sup>1</sup>. 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 (Bracr, 1927, Johnson, 1932, Metheny 1938, Carpenter 1942, McCloy and Young 1954). Earlier, in 1958, Franklin Henry’s Memory-Drum theory of narrow muscular reaction advocated that motor learning ability is task specific rather than general to various motor skills<sup>2</sup>.

Development of the motor ability is an important part of a child’s physical development. In motor development, changes in activity can be observed through the physical progress<sup>3</sup>. For example, before acquiring the ability of walking, the child passes through a number of stages. Although individual differences are visible in motor activity, even to the extent of individual styles of walking being very distinctive, the approximate time of the development and appearance of certain motor activities in physical development can be established.

Motor development is an important prerequisite for man’s motor leaning. Along with other development, motor development continues during childhood and adolescence<sup>4</sup>. An in this, much importance is attached to various physical movements and exercises. It is for this reason that modern colleges, academic teaching and training are accompanied by various physical

exercises, games and many activities that require motor activity. It helps to develop in child many handicrafts that assist him in his adopting some particular career. Some such handicrafts are stitching and sewing, wood work, typewriting, cooking, etc. Motor control is essential in all handicrafts. Motor development is an important part of overall comprehensive development.

Many factors cast a very profound influence upon the child’s motor development. The object of motor learning is the acquisition of skill in some particular physical movement or employment. And to gain skill in any work that requires handling it is essential to start with the fundamental movements<sup>5</sup>, and to progress gradually to the more complex motions. It is not very fruitful to hope for all students that they will attain the same level of competence and skill in any motor activity for which they are being trained. All people cannot be equally successful in one particular skill, irrespective of the quality of implements and equipment used as well as the time taken in training them. Practice should be made to conform to age and capability. Small children should be forced to practice for shorter periods of time, while older people can benefit by longer sessions of work. It was hypothesized that motor educability and tribal and non tribal belongingness shown their influence jointly on physical skills of male players.

### Methodology

To conduct the study 200 tribal maleplayer and 200 non tribal male players were selected as a sample from tribal and non tribal areas of Vidarbha region. Thus total 400 samples were selected for the proposed research work. The age group of the

sample ranged between 13 to 18 years. All the samples selected through random sampling method.

**Criterion measures:** To conduct the study following test was conducted to all the samples for the collection of data.

**Physical Skill Test:** To find out the physical skill of tribal and non tribalmale players physical skill test prepared by B. Johnson was used. This test is highly valid and reliable for the school going students. This test consists with 10 items and these items performed on 15 feet long and 4.6 feet wide mat<sup>6</sup>.

**Metheny Johnson Test:** To measure motor educability of selected samples Metheny Johnson test was used. This test consists with 4 items i.e. front roll, back roll, jumping half turn and jumping full turn. This test also performed in a canvas measuring 15 feet in length and 2 feet wide. Scoring was done according to rule led down by author<sup>7</sup>.

## Results and Discussion

**Analysis and Interpretation:** For the testing of above mention hypothesis i.e. motor educability and tribal and non tribal belongingness of male players will show their interaction effect on physical skills as suggested by Winner factorial design method was used. In this method joint effect of motor educability and tribal and non tribal belongingness of male players on physical skill was tested. Therefore 2X2 ANOVA technique was adopted. For that purpose motor educability was varied to two levels. While varying this independent variable to two levels the conventional criteria  $Q_1$  and  $Q_3$  (First and third

quartile) were followed. In this case of motor educability  $Q_1$  and  $Q_3$  were used as cutting point for identifying the low motor educability and high motor educability respectively. The player who got scores equal to  $Q_1$  and below comes under low motor educability group and the players who's scores equal to  $Q_3$  and above comes under high motor educability group. After that the joint effect of motor educability and tribal and non tribal belongingness of boys players was tested on physical skill. The obtained result has been presented in table number 1.

It should be noted from table number 1 that the main effects of motor educability upon physical skill of male players have found to be statistically significant. The 'F' ratio 332.76 which is significant at .01 level indicates that the motor educability as a independent variables able to influence physical skill of boys players. High motor educability group have shown more physical skill (M= 76.74) compared to low motor educability group (M= 62.19).

Further the main effect of tribal-non tribal belongingness reported in table number 1 found to be statistically significant. 'F' ratio 9.01 which is significant beyond .01 level revealed that tribal boys have shown more physical skill (M= 70.66) compared to non tribal boys (M= 68.26).

The 'F' ratio 7.57 found to be statistically significant beyond .01 level. Thus it can be said that the interaction effect of motor educability and tribal-non tribal belongingness on physical skill of male players have able to show their influence. High motor educability tribal boys have shown more physical skill compared to other groups.

**Table-1**  
**Motor Educability (A) x Tribal-Non Tribal Belongingness (B) on Physical Skills of Selected Male Subjects (n=328)**

B <sub>1</sub>	Tribal-Non Tribal Belongingness (B)		M
	B <sub>2</sub> Tribal Boys	Non Tribal Boys	
A <sub>1</sub> (High)	M=76.84 N=81	M=76.64 N=89	76.74
A <sub>2</sub> (Low)	M=64.48 N=80	M=59.89 N=78	62.19
M	70.66	68.26	

### ANOVA SUMMARY

Source of Variation	SS	Df	MS	F
A	17310.491	1	17310.491	332.76**
B	459.012	1	469.012	9.01**
AB	394.276	1	394.276	7.57**
Within treatment	16854.575	324	52.020	
		(Error)		

\*\* Significant at .01 level, NS Not Significant

## Conclusion

The result reported in table number 1 revealed that, the joint effect of motor educability and tribal-non tribal belongingness of male players able to influence physical skill.

## References

1. Kansal D.K., Test and measurement in sports and physical education, D.V.S. Publication, New Delhi, 285-286, (1996)
2. Paris J. Physiol. Motor learning in Man: A review of functional and clinical studies, **99(4-6)**, 414-24 (2006)
3. Stepinski Milosz et al, The level of chosen motor abilities of 13 years old soccer players, *Journal of Human Kinetics*, **9**, (2003)
4. Walkley J., Holland et al: Fundamental motor skill proficiency of children, *ACHPER National Journal*, **40(3)**, 11-14 (1993)
5. Zetou Eleni: The role of modeling in motor skill learning Inquiries in Sport and Physical Education, **1**, 58-79 (2003)
6. Johnson Granville, Physical skill tests for sectioning classes into homogeneous units, *American physical education association research quarterly*, **3**, 128-137, (1932)
7. Metheny Eleanor, Studies of the Johnson's test as a test of motor educability, *Research quarterly*, 9, 4 (1938)