

# Variation in Motor Performance among 11 To 14 Years School Boys of Different Regions of Karnataka State

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**Abstract:-** Motor development is the most important aspect of growth and development. Motor development depends on the interaction of experience with an individual's physical, cognitive, psychosocial status and proceeds in a predictable fashion across developmental periods. The differences in motor performances as motor outcomes are indicative of physical fitness. The researcher intended to assess the variation in motor performance among school boys studying in different regions of Karnataka. The researcher selected 6 districts included in the present study. 200 boys from each age group are been selected. Hence total 1200 School boys were selected for the present study by convenient sampling technique. The researcher intended to assess the five variables such as Flexibility, Endurance, Agility, Speed, Explosive strength. Tool used in the present study include Measuring tape, stop watch, high jump stand & cones. The data was analyzed by using both descriptive and inferential statistics. The result of the study showed that Comparison of motor performances 11 years old children of both the groups. A significant difference was found in 20 yards sprint test of both the groups with  $P < 0.02$  and calculated variance 4.44 with mean speed of sample 1 (Malnad maidens) 4.2 +0.62 seconds as compared to sample 2 (coastal geographical area) 4.64 + 0.71 seconds. A significant difference was found in agility of both the groups with  $P < 0.02$ . Comparison of motor performances 12 years old children of both the groups. A significant difference was found endurance and flexibility of both the groups. For sit up test  $P < 0.014$  and calculated variance 4.32. Comparison of motor performances of 13 years old boys of both the groups. A significant difference was found in agility of both the groups with  $P < 0.13$  and calculated variance 3.27 with mean pro-agility shuttle run of sample 1 (Malnad Maidens) 5.98+0.64 seconds as compared to sample 2 (coastal geographical area) 4.98 + 0.72 seconds. There was no significant difference found between other motor performances; 20SP, Vertical jump, Sit up test and sit and reach test. The study concluded that these findings are of immense importance for physical directors as to focus on individual differences on various areas of motor performances of 11 to 14 years of age's children.

## I. INTRODUCTION

Developmental stages and events of growth occur through a complex, organized process characterized by predictable. Physical activity among children and adolescents strongly related to the mastery of fundamental motor skills and in turn may contribute to physical, social, and cognitive development. Mastering fundamental motor skills also is critical to fostering physical activity because these skills serve as the foundation for more advanced and sport-specific movement.<sup>1</sup>

The identification of qualitative difference in motor abilities of the children belonging to different geographical region has stimulated interest of many research scholars to work as this area. In India very few attempts have been made to explore the motor performance of children from different geographical regions.<sup>2</sup>

## II. SIGNIFICANCE OF STUDY

- The present study states that growth and maturation rate varies widely among individuals.
- The present study reveals that it is unrealistic to expect children at the same age to have the same physical development, motor skills, and physical capacity.
- The identification of qualitative difference in motor abilities of the children belonging to different geographical region has stimulated interest of many research scholars to work as this area.
- In India very few attempts have been made to explore the motor performance of children from different geographical regions.
- The development of motor abilities their accurate assessment invariably help in identifying talented children and also in formulating scientific training programmes for the children for various ages, so that it leads to the achievement of high performance at the right age and also to preclude any negative or harmful effect of training on them.
- Poor motor proficiency, by limiting participation in physical and social activities, can therefore contribute to poor psychological and social development.

❖ *Statement of the Problem*

“Variation in motor performance among 11 to 14 years school boys of different regions of Karnataka state”.

❖ *Objectives of the Study*

- To assess the motor performance of school boys in Malnadu Maidan region
- To assess the motor performance of school boys in Costal geographical region
- To compare the motor performance of school boys in Malnadu Maidan region & Costal geographical region
- To find out the association between motor performance of school boys with their selected socio-demographic variables

❖ *Selected Variables*

Variables selected in the present study are

➤ *Dependent Variable*

Motor performance of school boys like speed, explosive strength, endurance, ability & flexibility.

➤ *Socio Demographic Variables*

It includes socio demographic characteristic of school boys like Age, Educational status, Religion, type of diet, residence.

❖ *Assumptions*

Refers to beliefs that are held to be true but have not necessary been proven.

The study is based on the following assumptions:

- Tool used for the study will be sufficient to assess the motor performance of school boys
- The school boys will be willing to participate in the study effectively.
- The participants will extend their co-operation in providing factual information.
- The response measured in the present study will represent the actual motor performance of school boys

❖ *Hypothesis*

**H<sub>1</sub>:** There would be a significant difference between motor performances like speed, Explosive strength, Agility, Endurance & flexibility among school boys of Malnadu Maidan region & Costal geographical region of Karnataka state

**H<sub>2</sub>:** There would be a significant association between the motor performances of school boys in Malnadu Maidan region with their selected socio-demographic variables

**H<sub>3</sub>:** There would be a significant association between the motor performances of school boys in Costal geographical region with their selected socio-demographic variables

❖ *Delimitations*

- The study is delimited to school boys of 11 to 14 years age
- The study is delimited to school boys of residing in Malnadu Maidan region & Costal geographical region of Karnataka state
- The study is delimited to motor performances like speed, Explosive strength, Agility, Endurance & flexibility.

❖ *Selection of Variables:*

The five motor performance variables selected for the study were

- a. Muscular strength
- b. Explosive strength
- c. Speed
- d. Flexibility
- e. Agility

❖ *Administration Of The Test:*

The tests were administered by the following methods;

Sl. No	Motor performance Variables	Tests	Criterion measure In
1	Flexibility	Sit and reach	Centimeters
2	Muscular Endurance	Sit up test	In numbers
3	Agility	Pro agility Shuttle run	Seconds
4	Speed	20 yard sprint	Seconds
5	Explosive strength	Vertical jump	Centimeters

Table 1

**III. RESULTS**

- Comparison of motor performances 11 years old children of both the groups. A significant difference was found in 20 yards sprint test of both the groups with  $P < 0.02$  and calculated variance 4.44 with mean speed of sample 1 (Malnad maidens)  $4.2 + 0.62$  seconds as compared to sample 2 (coastal geographical area)  $4.64 + 0.71$  seconds. A significant difference was found in agility of both the groups with  $P < 0.02$  and calculated variance 6.58 with mean pro-agility shuttle run of sample 1 (Malnad maidens)  $6.34 + 0.76$  seconds as compared to sample 2 (coastal geographical area)  $5.93 + 0.83$  seconds. There was no significant difference between other motor performances 20SP, Vertical jump, Sit up test and sit and reach test.
- Comparison of motor performances 12 years old children of both the groups. A significant difference was found endurance and flexibility of both the groups. For sit up test  $P < 0.014$  and calculated variance 4.32 with mean sit up repetitions of sample 1 (Malnad maidens)  $21.6 + 8.62$  repetitions as compared to sample 2 (coastal geographical

area) 28.2 + 8.34 repetitions. The mean repetitions for sit and reach test were 0.24 +8.43 for of sample 1 (Malnad maidens) and 0.32+7.13 for sample 2 (coastal geographical area) with P value  $P < 0.026$  and calculated variance 4.64. There was no significant difference found between other motor performances; 20SP, Vertical jump and pro-agility shuttle run test.

- Comparison of motor performances of 13 years old boys of both the groups. A significant difference was found in agility of both the groups with  $P < 0.13$  and calculated variance 3.27 with mean pro-agility shuttle run of sample 1 (Malnad Maidens) 5.98+0.64 seconds as compared to sample 2 (coastal geographical area) 4.98 + 0.72 seconds. There was no significant difference found between other motor performances; 20SP, Vertical jump, Sit up test and sit and reach test.
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#### IV. CONCLUSION

A significant difference was found between motor performances of 11 Yrs to 14 Yrs school boys. These findings are of immense importance for physical directors as to focus on individual differences on various areas of motor performances of 11 to 14 years of age's children.

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