



ISSN: 2278 – 0211 (Online)

## A Study On Relationship Between Creative Motor Response And Kinesthetic Perception Of Children

**Dr. Saugata Sarkar**

Assistant Teacher, Raniganj KC High School, Kamaldanga, Malda, West Bengal, India

### **Abstract:**

*In the field of sports, activity is the basis of performance. The voluntary movements are learned in response to any stimulus. Some team game like football or hockey and sports like gymnastics require bodily aesthetic sense and creative motor response. So it was the purpose of the study to find out the relationship between creative motor response and kinesthetic perception of different age group of children. One eighty school children were randomly selected from the 'Dooars' region of West Bengal. Creative motor response was measured by a motor creativity test battery (M.C Ghosh, 1991) and kinesthetic perception was measured by distance perception jump. Mean, standard deviation, and Pearson Product Moment Correlation were computed to analyse the data. The level of significance was set at .05 levels of significance. It was found that significant negative relationship exists between motor creativity and kinesthetic perception. The study showed that this relationship becomes stronger with the improvement of age of the children. From the results of this study it is found that motor creativity possesses negative relation with kinesthetic perception of the children.*

**Key words:** Motor Creativity, kinesthetic perception, relationship, children

### **1.Introduction**

Creativity is defined in many ways by many educationists and psychologists. Feldhusen and Goh (1995) defined creativity as a complex mix of motivational conditions, personality factors, environmental conditions, chance factors and end products'. Albert (1990) said that creativity is about making decisions not products. If we modify Albert's definition, it can be said that creativity is also about making decisions and not solely about products. The degree of creativity may differ. So it can be said that creativity is the ability to think and produce something original where generation of new ideas for routine things is as important as creating a piece of art. When this creativity is generated by the movement is known as the motor creativity. It means one's divergent movement ability in response to any stimulus. On the other hand kinesthetic sense is the awareness of the body or body parts during movement. In case of activity like gymnastics or diving where bodily aesthetic movement is highly judged. Similarly in competitive sports creative motor response is highly required especially where the player is unknown about the opponents' movement. So these two things are very essential for competition. Both the qualities are related with motor response of the body i.e. related to motor learning. Cerebral and ganglia is responsible for motor learning which is very essential for normal life and in the field of all types of sports. Life is full of competition as sports. Proper movement is required for daily fast life as well as in the sports competition. Very few studies have empirically investigated the relationship between creative motor response and kinesthetic perception. So the effort was made to find out if there is any relationship between these two qualities. School and teachers play a crucial role in fostering creativity.

### **2.Methods**

For the present study the population was the school going children. 180 (One hundred eighty) male students of age six (60), seven (60) and eight (60) years from two general primary schools of Alipurduar municipality which is in the district of Jalpaiguri of West Bengal were selected for the study. Subjects were chosen randomly on the basis of their birth certificate. Two schools were selected of the town where the syllabus and co-curricular activity were same. All of the subjects were non-vegetarian and non-residential (day's scholar). They were all from lower middle class family. The subjects were selected at random from the whole class.

### **3.Criterion Measure**

A motor creativity test battery used by Dr. M.C Ghosh (1991) was used to measure creative motor response of the subjects and distance perception jump was used to measure the kinesthetic perception. Mean, standard deviation, and Pearson Product Moment Correlation were computed to analyse the data. The level of significance was set at .05 levels of significance.

#### 4.Result And Discussion

The main purpose of the present investigation was to analyse the relationship of motor creativity and kinesthetic perception of different age group of children. For understanding the relationship among the parameters of the present study the coefficient of correlation was calculated for all the age groups of children. It is noted that higher the score of creative motor response is the better performance but in case of kinesthetic perception lower the score better was the performance.

PARAMETERS	MEAN	SD	r
MC	88.30	8.32	-.20
KP	28.59	5.28	

Table 1: Coefficient Correlation Among Different Parameters Of 6 Years Age Group

\*r Value With Df 58 For N= 60 Is .254 At 0.05 Level Of Significance

\*\*r Value With Df 58 For N= 60 Is .330 At 0.01 Level Of Significance

It is seen from the table that the two parameters of motor creativity and kinesthetic perception of 6years of group of subjects exhibited negative correlation with each other. The relationship is insignificant.

PARAMETERS	MEAN	SD	r
MC	91.50	8.95	-0.52**
KP	25.27	4.67	

Table 2: Coefficient Correlation Among Different Parameters Of 7years Of Age Group

\*r Value With Df 58 For N= 60 Is .254 At 0.05 Level Of Significance

\*\*r Value With Df 58 For N= 60 Is .330 At 0.01 Level Of Significance

A similar was a trend for the significant negative correlation between and motor creativity and kinesthetic perception of this group.

PARAMETERS	MEAN	SD	r
MC	97.20	10.91	-0.78**
KP	23.13	3.85	

Table 3: Co Efficient Co Relation Among Different Parameters Of 8 Years Age Group

\*r Value With Df 58 For N= 60 Is .254 At 0.05 Level Of Significance

\*\*r Value With Df 58 For N= 60 Is .330 At 0.01 Level Of Significance

It is noted from the table 3 that the coefficient of correlation of motor creativity was negatively significant with kinesthetic perception of 8years of age group.

#### 5.Analysis Of The Result

Result revealed the fact through the study that there is a relationship of motor creativity and kinesthetic perception. Brain relies on sensory signals from muscle spindles that sense the lengthening and shortening the muscle, and movement occurs. On the other hand motor flexibility, fluency, originality also relies on the sensory region of the brain. A better understanding of the sites in the brain for processing of kinaesthetic information has been achieved using neuroimaging techniques. The picture is emerging of a central integration of sensory information from several sources, including vision, touch and kinaesthesia and the important role played by the cerebellum (Proske & Gandevia, 2009). As a result both the parameters are closely related to the other.

## 6. Conclusion

Creative motor response and kinesthetic perception is related with each other and as the children grow up this relationship becomes stronger. Though so many studies in this field and relative to the topic is scanty yet can safely be said that this type of study would help for further study.

## 7. Reference

- 1) Feldhusen, J. F., & Goh, B. E. (1995). Assessing and accessing creativity: An integrative review of theory, research, and development. *Creativity Research Journal*, 8(3), 231-247.
- 2) Fox, Edward L. and Mathews, Donald K. (1981). *The Physiological Basis of Physical Education and Athletics*. 3<sup>rd</sup> Edition, Philadelphia, Saunders College Publishing.
- 3) Gokhar, S. (1974). Creativity in Relation to Age and Sex. *Journal of Education and Psychology*. Vol.32, p.122.
- 4) Kamlesh, M.L. (2002). *Psychology in Physical Education and Sports*. Fourth Revised Edition, New Delhi, Metropolitan Book Co. Pvt. Ltd.
- 5) M.C Ghosh. (1991). A study on Creativity, Motor Creativity and Motor Ability of adolescent school boys and girls. Kalyani University. An unpublished Ph.D thesis, University of Kalyani.
- 6) Rowe, P.J. (1977). Motor Creativity of Mildly Mentally Retarded Pre – School Children. *Dissertation Abstract International*. Vol. 37 No.7 p. 42.
- 7) Truhon, S.A. (1983). Playfulness, Play and Creativity: A Path Analysis Model. *Journal of Genetic Psychology*. Vol.143, No.1, pp.19-28.
- 8) Wilson Robert Timothy. (1985). The Effect of Creative Movement and Contact Improvisation Experiences of self – Awareness. *Dissertation Abstract International*. No. 46, December, 1556 A.
- 9) Wyrick Warren. (1967). Comparison of Motor Creativity with Verbal Creativity. Motor Ability and Intelligence. *Completed Research in Health, Physical Education and Recreation*. No.9, 119.