



# International Journal of Physical Education, Sports and Health

P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (ISRA): 5.38  
IJPESH 2016; 3(5): 343-344  
© 2016 IJPESH  
www.kheljournal.com  
Received: 29-07-2016  
Accepted: 30-08-2016

**Moumita Mitra**  
M.P.Ed Students, P.G.G.I.P.E  
Banipur, West Bengal, India.

**Bapi Das**  
Research Scholar, Dept. of  
Physical Education, Kalyani  
University, Nadia, West Bengal,  
India.

**Dr. Amit Kumar Banerjee**  
Assistant Professor,  
P.G.G.I.P.E, Banipur, North 24  
Parganas, West Bengal, India.

## Relationship study on intelligence with psychomotor ability on school going girls

**Moumita Mitra, Bapi Das and Dr. Amit Kumar Banerjee**

### Abstract

Psychomotor ability is one of the importance fitness variables that are defined as the quality of being suitable to perform a particular task. Many different skills and activities require the development of psychomotor abilities. For that purpose of the study was to determine the relationship observe on selected psychomotor ability with general Intelligence among the school going girls. Sixty (60) female students were randomly selected from the one school of Bongaon sub division of North 24 pgs Districts of West Bengal. The age ranged of the subjects are 12-15 years. Kinesthetic perception were measured by Depth perception jump in cm, Static balance was measured by Stork Stand Test in seconds, reaction time were measured by Nelson speed reaction movement in cm and measure Intelligence level through Bengali version standardized questioner prepared by late Prof. Durgadas Bhatteerjee will be used in points scoring. Mean and S.D. were used as descriptive statistics. Coefficient of correlation was calculated for analysis, interpretation and discussion. A statistical calculation was conducted through SPSS 20 version and Excel Spread Sheet of Windows version 7 was used as statistical software. Statistical significance was fixed at 0.05% level of confidence. At the end of the result shows that there was no significantly relationship between the Intelligence and selected psychomotor ability of the school going girls.

**Keywords:** Intelligence, psychomotor ability and school going girls

### 1. Introduction

Sports have been part of human life almost since the time immemorial. It has been indispensable to mankind and has become part of his culture. Modern definition of fitness describes either a person or machine's ability to perform a specific function or a holistic definition of human adaptability to cope with various situations. Psychomotor ability is one of the importance fitness variables that are defined as the quality of being suitable to perform a particular task. Many different skills and activities require the development of psychomotor abilities.

Concepts of "intelligence" are attempts to clarify and organize this complex set of phenomena. Although considerable clarity has been achieved in some areas, no such conceptualization has yet answered all the important questions, and none commands universal assent. It is very important part of every situation of human life. Psychomotor abilities are the process by which individuals build the cognitive and physical connections necessary to gain such abilities. Many different skills and activities require the development of psychomotor abilities. Basic skills learned during early development, such as walking and jumping, required the development of such abilities. It has been no significantly difference between the general intelligence and selected anthropometric variables among the Tribes community. (Das & Mukhopadhyay, 2014) as well as no significantly correlate among the psychomotor abilities and anthropometrical variables. (Soren & Mukhopadhyay, 2013)

Researcher fills difficulty to define the psychomotor ability in respect of growth pattern of school going girls. With such background researcher was determine the relationships between selected psychomotor ability with general Intelligence among the school going girls. Possibly the result would be helpful to the teachers & coaches for selecting and constructing training programs for the future school players.

### 2. Purpose of the Study

The purpose of the present study is to determine the relationship observe on selected psychomotor ability with general Intelligence among the school going girls.

**Correspondence**  
**Moumita Mitra**  
M.P.Ed Students, P.G.G.I.P.E  
Banipur, West Bengal, India.

### 3. Methods & Materials

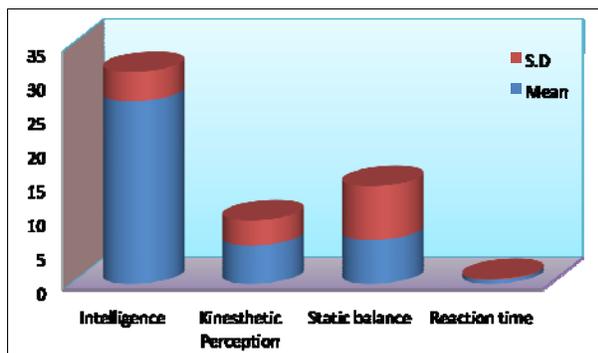
In Methodology of the study was to observe the relation with general Intelligence and psychomotor ability viz. Static balance, kinesthetic sense and reaction time of school going girl’s students. Sixty (60) female students were randomly selected from the one school of Bongaon sub division of North 24 pgs Districts of West Bengal. The age ranged of the subjects are 12-15 years. Kinesthetic perception were measured by Depth perception jump in cm, Static balance was measured by Stork Stand Test in seconds, reaction time were measured by Nelson speed reaction movement in cm and measure Intelligence level through Bengali version standardized questioner prepared by late Prof. Durga das Bhatteerjee will be used in points scoring. Data was collected by the researcher himself in a day starting from morning. The subjects were oriented about the purpose well in advance. The subjects were tested one by one. Data collected by the subjects were converted into standard scores for better statistical calculation and interpretation. Mean and S.D. were used as descriptive statistics. Coefficient of correlation was calculated for analysis, interpretation and discussion. A statistical calculation was conducted through SPSS 20 version and Excel Spread Sheet of Windows version 7 was used as statistical software. Statistical significance was fixed at 0.05% level of confidence.

### 4. Result

**Table 1:** Representing Mean and Std. Deviation of selected variables of the Subjects

Variables	Mean	SD	N
Intelligence (Score)	26.82	4.30	60
Kinesthetic Perception (cm.)	5.62	3.68	60
Static balance (sec.)	6.41	7.91	60
Hand reaction time (sec.)	0.54	0.13	60

From Table-1 it was indicated that the mean and S.D. value of Intelligence were  $26.82 \pm 4.30$  score, Kinesthetic Perception were  $5.62 \pm 3.68$  cm, Static balance were  $6.41 \pm 7.91$  and Reaction time were  $0.54 \pm 0.13$  sec. respectively. The mean and S.D. value of all the selected variables of the subjects have been shown graphically (Figure – 1).



**Fig 1:** Graph Representing Mean & S.D Scores on Selected variables among the Subjects

**Table 2:** Representing Coefficient of Correlation of Intelligence and selected psychomotor ability of the school going girls.

Variables	r value
Intelligence	Kinesthetic Perception 0.050 <sup>NS</sup>
	Static balance 0.181 <sup>NS</sup>
	Hand reaction time 0.135 <sup>NS</sup>

Level of confidence significance at  $r_{0.05(2,38)} = 0.25$

The calculative “r” value of Intelligence with Kinesthetic Perception were 0.050, Intelligence with Static balance were 0.181, and Intelligence with Reaction time were 0.135 which was less than the tabulated value  $r'$  in  $p < 0.05$  at  $df(58) = 0.25$ . So, it indicates that there was no significant relationship between the Intelligence and selected psychomotor ability of the school going girls.

### 5. Discussion of Findings

The result of the present study revealed that no significant difference were found on kinesthetic perception jump, static balance abilities, and hand reaction time of school going girls students. It may be due to the fact of that school going girls were lacking proper scope and facilities from their family and environment because of that they belonging to very poor family. They have been suffering from proper nutrition other requirements for the development intelligence. That’s why the researcher was found the significant relationship among the variables.

### 6. Conclusions

On the basis of the result obtained from the study, following conclusions were drawn:

1. The finding of the present study revealed that there was no significant relationship of Kinesthetic Perception jump with Intelligence of school going girls.
2. Similarly, the finding of the present study revealed that there was no significant relationship of Static balancing ability with Intelligence of school going girls.
3. From the finding of the present study it was evidenced that there was no significant relationship of Hand reaction time with Intelligence of school going girls.

### 7. References

1. Thomas RB. Effect of stimulus condition and Direction on reaction Time Movement Time of closed and open skill Athletes, Dissertation Abstract International, 1972.
2. Carried H. Reaction and speed of Movement in Females of Various Age, Research Quarterly, 1963.
3. Goon S, Mukhopadhaya M, Bhattacharyya AK. A study of Creative Motor Responses in Relation to Intelligence, Age, Sex and locality. Indian Journal of sports science and physical education. 1983; 5:1.
4. Debbie L. Muscular power, Reaction time and Visual Perception related to striking Abilities of Second Grade children, Dissertation Abstract International, 1985, 45.
5. Ackerman P. Individual differences in skill learning: An integration of psychometric and information processing perspectives. Psychological Bulletin. 1987; 102:1.