# A STUDY OF RELATIONSHIP BETWEEN SELECTED PERSONALITY TRAITS AND MOTOR ABILITY AMONG THE AGRICULTURAL TOWN AND INDUSTRIAL TOWN

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#### **Abstract:**

Personality is the particular combination of emotional, attitudinal, and behavioural response patterns of an individual. Motor ability is the ability to perform fundamental motor skills involving all basic performances traits. The purpose of the study was to assess motor abilities, personality characteristics of class ix students of Agricultural & Industrial male students of class ix, correlate motor ability with their personality characteristics of Agricultural & industrial town male students and compare the motor ability & personality characteristics of agricultural town & industrial town male students. For this study one hundred & twenty male students were selected of class ix from different district of West Bengal. Personal data like age, height, weight were taken. Motor abilities – zigzag run, standing broad jump & 6lbs medicine ball put were measured. And the personality was measured with the help of standardized questionnaire. Analysis of the data by using Mean, S.D., Co-efficient of correlation & 't' value. After the statistical analysis, it was found that, Industrial town boys were better in motor ability than Agricultural town boys. The coefficient of correlation between different traits & motor ability were drawn, some negative & some positive results were found but all were not significant at 0.05 level thus the coefficient of correlation between neuroticism & motor ability & self confidence & motor ability of Industrial town boys shows negative relationship but in significant at 0.05 level on the other hand other four traits show positive relationship but insignificant at 0.05 level. The coefficient of correlation between Neuroticism & Motor ability & Dominance & Motor ability of Agriculture town boys show negative relationship but insignificant at 0.05 level. There was no significant relationship between selected personality traits & motor ability of the Agricultural & Industrial town school boys.

Key words: Personality, Motor ability, Trait.

#### INTRODUCTION

Personality psychology is a branch of psychology that studies personality and its individual differences. Its areas of focus include: Construction of a coherent picture of the individual and his or her major psychological processes, Investigation of individual differences & investigating human nature and human's similarities.

"Personality" is defined as a dynamic and organized set of characteristics possessed by a person who uniquely influences his or her cognitions, emotions, motivations, and behaviours in various situations. The word "personality" originates from the Latin *persona*, which means mask. In the theatre of the ancient Latin-speaking world, the mask was not used as a plot device to *disguise* the identity of a character, but instead was a convention employed to represent or *typify* that character.

Personality is the product of heredity & environment. It is recognised that that the different faculties of personality are closely related & interdependent & one cannot be separated from the other. Thus we get the relationship between the physical & mental faculties of individual's personality, performance in sports & psychic side, mental makeup & selection of activities for participation etc. Assumption of different faculties of personality is only for better study & understanding. Although an individual's personality is formed early in life, it can be modified by later experiences. Participation in physical education activities plays a great role in the process of development of individual's personality.

A trait may be thought of as a dimension, i.e. a line made up of an infinite number of possible points, any one of which may be descriptive of some person with respect to the trait. Such a dimension has both an upper & lower limit with in which all persons fall.

Traits may be either unipolar & bipolar. Unipolar traits are most likely to be found among morphological& physiological variables, but the concept is equally applicable to aptitudes, performances, and some of the motivational traits for which some individuals possess very little aptitude or skill of a particular kind. A Bipolar trait is one in which the trait scale extends from one extreme opposite.

A motor skill is a learned sequence of movements that combine to produce a smooth, efficient action in order to master a particular task. The development of motor skill occurs in the motor cortex, the region of the cerebral cortex that controls voluntary muscle groups.

Motor ability means the ability to perform fundamental motor skills involving all basic performances traits including coordination of arm eye & foot eye, muscular power, agility, muscular strength, cardio respiratory endurance, flexibility & speed.

The stages to motor learning are the cognitive phase, the associative phase, and the autonomous phase. (i) Cognitive Phase: When a learner is new to a specific task, the primary thought process starts with, "what needs to be done?" Considerable cognitive activity is required so that the learner can determine appropriate strategies to adequately reflect the desired goal. Good strategies are retained and inefficient strategies are discarded. The performance is greatly improved in a short amount of time (ii) Associative Phase: the learner has determined the most effective way to do the task and starts to make subtle adjustments in performance. Improvements are more gradual and movements become more consistent. This phase can last for a long time. The skills in this phase are fluent, efficient and aesthetically pleasing (iii) Autonomous Phase: this phase may take several months to years to reach. The phase is dubbed because the performer can now "automatically" complete the task without having to pay any attention to. Examples include walking and talking or sight reading while doing simple arithmetic.

Gross motor skill require the use of large muscle groups to perform tasks like walking, balancing, crawling. The skill required is not extensive and therefore are usually associated with continuous tasks. Much of the development of these skills occurs during early childhood. The performance level of gross motor skill remains unchanged after periods of non-use. Fine motor skill require the use of smaller muscle groups to perform tasks that are precise in nature. Activities like playing the piano and playing video games are examples of using fine motor

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skills. Generally, there is a retention loss of fine motor skills over a period of non-use. Discrete tasks usually require more fine motor skill than gross motor skills.

Kenneth Tillman (1965) in his study "Relationship between physical fitness & selected personality traits" on 386 school senior boys found that the boys who finished in the upper fifteen percent on the test were compared, by use of the test battery of three personality traits with the boys who were in the lower fifteen percent. Significant personality differences were found.

Alvin (1980) in his study "An administrative study of the effects of aerobic dancing on selected physical fitness and personality variables" hypothesised that there would be no statistically significant differences on the 5 physical fitness variables & on the 20 personality factors included in his test & inventories between the present & post test score.

## **METHODOLOGY**

For this study one hundred & twenty Agricultural & Industrial school's male students were selected of class ix from different district of West Bengal. They were selected from four Secondary school of separate district of West Bengal. The schools were selected at randomly two from Agriculture town & two from Industrial town. Personal data like age, height, weight were taken. Motor abilities - zigzag run, standing broad jump & 6lbs medicine ball put were measured. And the personality was measured with the help of standardized questionnaire. Analysis of the data by using Mean, S.D., Co-efficient of correlation &'t' value. After the statistical analysis, it was found that, Industrial town boys were better in motor ability than Agricultural town boys. The coefficient of correlation between different traits & motor ability were drawn, some negative & some positive results were found but all were not significant at 0.05 level thus the coefficient of correlation between neuroticism & motor ability & self confidence & motor ability of Industrial town boys shows negative relationship but in significant at 0.05 level on the other hand other four traits show positive relationship but insignificant at 0.05 level. The coefficient of correlation between Neuroticism & Motor ability & Dominance & Motor ability of Agriculture town boys show negative relationship but insignificant at 0.05 level. There was no significant relationship between selected personality traits & motor ability of the Agricultural & Industrial town school boys.

#### RESULTS

**Table 1** represents Mean & S.D. of age, height & weight of the school of Agriculture town & Industrial town students.

Table 1

Mean & S.D. of age, height & weight of the students

	Students of Agriculture town school N = 40			Students of		rial town school 80		
	Range	Mean	S.D.	Range	Mean	S.D.		
Age (Years)	15 – 16	15.02	0.15	15 – 17	15.17	0.38		
Height (c.m.)	134 – 170	138.37	7.38	154 – 172	162.34	4.85		
Weight (kg)	30 - 55	43.40	5.26	41 - 63	50.11	4.55		

**Table 2** represents that Co- efficient of Correlation between personality trait & motor ability of agricultural town school boys.

Table 2

Co- efficient of Correlation between personality trait & motor ability of agricultural town school boys

Personality Trait	Mean (Personality	Mean (Motor	ʻr'	Interpretation
	Trait)	Ability)		
Neuroticism	—8.97	151.62	0.24	Not significant at 0.05 level of confidence.
Self - sufficiency	—7.47	151.62	0.18	Not significant at 0.05 level of confidence.
Introversion	—5.45	151.62	0.03	Not significant at 0.05 level of confidence.
Dominance	16.47	151.62	0.21	Not significant at 0.05 level of confidence.
Self - confidence	—19.22	151.62	0.11	Not significant at 0.05 level of confidence.
Sociability	—13.50	151.62	0.30	Not significant at 0.05 level of confidence.

N = 80, df = 78

**Table 3** represents that Co- efficient of Correlation between personality trait & motor ability of Industrial town school boys.

Table **3**Co- efficient of Correlation between personality trait & motor ability of Industrial town school boys

Personality Trait	Mean (Personality	Mean (Motor	ʻr'	Interpretation
	Trait)	Ability)		
Neuroticism	—12.56	159.62	-0.08	Not significant at 0.05 level of confidence.
Self - sufficiency	0.93	159.62	0.014	Not significant at 0.05 level of confidence.
Introversion	—6.58	159.62	0.05	Not significant at 0.05 level of confidence.
Dominance	19.96	159.62	0.05	Not significant at 0.05 level of confidence.
Self - confidence	—26.60	159.62	-0.11	Not significant at 0.05 level of confidence.
Sociability	<del></del> 7.67	159.62	0.21	Not significant at 0.05 level of confidence.

N = 40, df = 38

**Table 4** represents that inter correlation between personality trait & motor ability by three schools.

Table **4**Inter correlation between personality trait & motor ability by three schools

personality Trait	School	No. Of subject	Mean (personality	Mean (Motor	ʻr'	Interpretation
	Pannalal Institution	68	<b>Trait</b> ) —11.97	<b>Ability</b> ) 165.36	0.07	Not significant at 0.05 level of confidence.
Neuroticism	Bolpur N.N.B. High School	40	—8.97	151.62	0.24	Not significant at 0.05 level of confidence.
	Sodepur T.B. High School	12	—15.91	127.08	0.02	Not significant at 0.05 level of confidence.

	Pannalal Institution	68	0.19	165.36	0.26	Significant at 0.05 level of
						confidence.
Self-	Bolpur N.N.B.	40	<b>—</b> 7.47	151.62	0.18	Not significant at
sufficiency	High School					0.05 level of
						confidence.
	Sodepur T.B.	12	5.16	127.08	-0.04	Not significant at
	High School					0.05 level of
						confidence.
	Pannalal	68	<b>—</b> 6.51	165.36	-0.02	Not significant at
	Institution					0.05 level of
	D 1 1111 D		- 4-	151.60	0.00	confidence.
	Bolpur N.N.B.	40	<b>—</b> 5.45	151.62	0.03	Not significant at
Introversion	High School					0.05 level of
	Codonus T.D.	12	<b>—</b> 7.00	127.00	0.01	confidence.
	Sodepur T.B. High School	12	<b>—</b> 7.00	127.08	0.01	Not significant at 0.05 level of
	riigii School					confidence.
	Pannalal	68	19.52	165.36	0.46	Significant at 0.05
	Institution	00	13.32	105.50	0.40	level of
	mstration					confidence.
	Bolpur N.N.B.	40	16.47	151.62	-0.21	Not significant at
Dominance	High School	-	-			0.05 level of
						confidence.
	Sodepur T.B.	12	22.41	127.08	-0.08	Not significant at
	High School					0.05 level of
						confidence.
	Pannalal	68	-26.61	165.36	-0.11	Not significant at
	Institution					0.05 level of
						confidence.
	Bolpur N.N.B.	40	<b>—</b> 19.22	151.62	0.11	Not significant at
Self- concept	High School					0.05 level of
						confidence.
	Sodepur T.B.	12	<b>—</b> 26.50	127.08	0.18	Not significant at
	High School					0.05 level of
					0.77	confidence.
	Pannalal	68	<b>—</b> 6.54	165.36	0.22	Not significant at
	Institution					0.05 level of
Sociability	Deleve N. N. D.	40	12.50	154.63	0.20	confidence.
Sociability	Bolpur N.N.B.	40	<b>—</b> 13.50	151.62	0.30	Not significant at 0.05 level of
	High School					confidence.
	Sodepur T.B.	12	-14.08	127.08	0.04	Not significant at
	High School	12	— 14.Uo	127.00	0.04	0.05 level of
	riigii Juliooi					confidence.
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## **DISCUSSION**

From the results it was found that, (i) Industrial town boys Industrial town school boys were better in motor ability than Agricultural town school boys. (ii) When the co-efficient of correlation between different traits & motor ability were drawn, some negative & some positive results were found but all are not significant at 0.05 level thus the coefficient of correlation between Neuroticism & motor ability and Self confidence & motor ability of Industrial town boys shows negative relationship but in significant at 0.05 level on the other hand other four trait show positive — relationship but insignificant at 0.05 level. The coefficient of correlation between Neuroticism & motor ability and Dominance & motor ability of Agricultural town boys show negative relationship but insignificant at 0.05 level. (iii) There was no statistically significant relationship between selected personality trait & motor ability of Industrial town school boys & Agricultural town school boys.

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