A Comparative Study Of Multiple Intelligence Among X Standard Higher Achievers In Coimbatore

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Abstract: Language is the means of communication in the world. Logical thinking, calculating analysis, creative representation, use of the body to solve problems makes us understand the world. Musical feelings cauterize all the emotional thinking of an individual. A person analyses himself and others through his intelligence. The good news is that the theory of Multiple Intelligences has grabbed the attention of many educators around the country and hundreds of schools are currently using it philosophy to redesign the way it educates the children. So, this study claims about the level of Multiple Intelligence of X standard higher achievers in Coimbatore region. For this study, 44 students from 3 schools are randomly selected at Coimbatore in Tamil Nadu. Mean, "t" test, ANNOVA, the statistical technique is used for analysing the data. The result of the study reveals that the locality, gender, educational institutions does not interfere with level of the Multiple Intelligences.

Keywords used: Multiple Intelligence, higher achiever, X Std

I. INTRODUCTION

Intelligence is the ability to solve problems or to create products that are valued within one or more cultural settings. All human beings have Multiple Intelligences. According to Howard Gardener the Multiple Intelligences are Logical Mathematical intelligence, Musical intelligence, bodily-kinaesthetic intelligence, Visual Spatial Intelligence, Interpersonal Intelligence and Naturalistic Intelligence. These Multiple Intelligences can be nurtured and strengthened or ignored and weakened. Howard Gardner's (1983, 1993, 1999a, 1999b, 1999c, 2004, 2008, 2011) work with the Multiple Intelligences coincides with the latest brain researches and offers insights for teachers.

II. MULTIPLE INTELLIGENCES

Logical-Mathematical intelligence consists of scientific analysis and mathematical ability. This is the ability associated with logical thinking, deductive reasoning and detecting pattern.

Linguistic Intelligence means mastery of language. This intelligence includes the ability to effectively manipulate language to express oneself rhetorically or poetically

Solving problems is the ability to manipulate and create mental images in unlimited visual domain. This spatial intelligence is formed in the visually challenged children.

Musical intelligence is recognizing and composing musical pictures, tones and rhythms which capable the musical challenges. Pitch and tone of the music related to the auditory function that knowledge of rhythm does not depend upon it.

Bodily-Kinaesthetic Intelligence one's body movement coordination is the bodily kinaesthetic intelligence which depends on the mental ability. So the mental and physical ability are related.

The Inter Personal Intelligences includes the personal feelings and intentions of others.

Intrapersonal intelligence is the ability to understand one's own feelings and motivations.

Naturalist intelligence is the human ability to discriminate among the living things, plants and animals. sensitivity to features of the natural world, clouds and rock configuration are also designated by naturalistic intelligence of human.

Although the intelligences are anatomically separated from each other, Gardner claims that the eight intelligences can very rarely operate independently. For example, a dancer can excel in his art only if he has
- strong Musical intelligence to understand the rhythm and variations of the music,
- Interpersonal Intelligence to understand how he can inspire or emotionally move his audience through his movements, as well as
- Bodily-Kinaesthetic Intelligence to provide him with the agility and coordination to complete the movements successfully.

III. NEED FOR STUDY

The successful students in studies, music, sports, painting, drawing and other extra-curricular activities receive a degree or a license to practise or opportunity to enter a desired career. One who fails in this may find many paths blocked. So, it is very important to study the intelligence level of the students, especially for X standard students. Students should understand the situation, analyse the procedures followed, Logically analysing the workable solutions, arrive at an adoptable one, able to break the obstacles and pave the way for a successful life. In the year 1985, a movie titled "The Breakfast" clubs 'five very different students spend a day in Saturday detention. These students – "a brain, an athlete, a basket case, a princess and a criminal" – found out that they all have different talents and strengths and that each of them has something valuable to contribute to the group (Hughes, 1985). Students have had different strengths, like the characters in the movie, and good teachers have found ways to each of these students to shine, based on their natural abilities. This is the hallmark of using the Multiple Intelligence theory in the classroom.

OBJECTIVES

Objectives of the study were
- To identify the Level of Multiple Intelligence in the higher achievers of X standard students in Coimbatore.
- To find out the Correlation among the Multiple Intelligences of higher achievers of X standard students in Coimbatore.
- To study the Influence of Locality differences, Type of schools and sex differences on Multiple Intelligence in the higher achievers of X standard students in Coimbatore.

HYPOTHESIS

- Higher achievers do not differ in their level of the Multiple Intelligence.
- Sex makes no influences on the Multiple Intelligence of X standard higher achievers.
- Locality makes no on the Multiple Intelligence of X standard higher achievers.
- Type of school makes no influences on Multiple Intelligence of X standard higher achievers.
- There is no relationship between either of the Multiple Intelligences.

SAMPLE

44 students from 3 schools
- Bharathi Matriculation Higher Secondary School, Coimbatore.
- Municipal Higher Secondary School, RS puram Coimbatore.
- Government Higher Secondary School, Thadagam Coimbatore.

Sample consists of the achievers in different areas, those who have got certificates in studies, dance, music, sports, painting, art and craft etc.

STATISTICAL TECHNIQUES USED

- Mean and the standard deviation of the whole sample.
- Carl Pearson's correlation to test the relation between Multiple Intelligence.
- 't' test to test the significant difference.
- ANOVA to test the difference among the type of schools.

ANALYSIS AND INTERPRETATION OF DATA

INTELLIGENCE LEVEL	NUMBER	PERCENTAGE
80-90	4	9.09
90-100	24	54.55
100-110	10	22.72
110- 120	6	13.63

Table 1: Level of Multiple Intelligence

The above table shows that, 4 students are in the I.Q. level of 80-90. They are backward in studies. 24 students those who are in the I.Q. level of 90- 100 are average students. 10 students of 100- 110 of I.Q. are in superior category. 6 students having I.Q. level 110-120 are very superior students. So, the higher achievers differ in their level of Multiple Intelligence.

From the table 2, it shows that Music has a very low correlation with Kinesthetic Intelligences (.107), Interpersonal Intelligence (0.050) and Naturalistic Intelligence (.100) also there is a high correlation (0.627) between Interpersonal Intelligence and Natural Intelligence.

Multiple Intelligences	Maths	Linguistic	Music	Kina esthetic	Visual and Spatial	Inter personal	Intra personal	Natura listic
Mathematics	1	0.369	0.313	0.423	0.345	0.262	0.400	0.329
Linguistic	0.369	1	0.308	0.257	0.363	0.327	0.232	0.389
Music	0.313	0.308	1	0.107	0.515	0.437	0.050	0.100
Kinaesthetic	0.423	0.257	0.107	1	0.390	0.238	0.493	0.293
Visual and spatial	0.345	0.363	0.515	0.390	1	0.404	0.356	0.337
Inter personal	0.262	0.327	0.437	0.238	0.404	1	0.057	0.627
Intra personal	0.400	0.232	0.050	0.493	0.356	0.057	1	0.701
Naturalistic	0.329	0.389	0.100	0.293	0.337	0.627	0.701	1

Table 2: Relationship between either of the Multiple Intelligences

Tables	Mean	S.D	N	T
Male	178	21.7	13	.5007
Female	181.77	25.18	31	

Table 3: Sex Ratio in Intelligence level

Table 3 shows that, the obtained 't' value is 0.50 at 42 dt, and it is not significant at 0.05 level. Hence the null hypothesis

is accepted. (i.e.) sex difference influences no significant difference on the Multiple Intelligence of X standard higher achievers.

Locality	Mean	S.D	N	T
Rural	186.24	21.85	21	1.72
Urban	175.57	25.18	23	

Table 4: Locality Ratio in Multiple Intelligence

Table 4 shows that, the obtained 't' value is 1.72 at 42 dt, and it is not significant at 0.05 level. Hence the null hypothesis is accepted. (i.e.) Locality influences no difference on Multiple Intelligence level of X standard higher achievers.

Source of variation	SS	Df	MS	F
Between groups	241.48	2	120.48	0.25572
Within groups	19358.41	41	19358.41	
Total	19599.89	43		

Table 5: ANOVA result to show the influence of the type of school in Multiple Intelligence

Table 5 shows that, the obtained 'F' value is 0.255 which is less than the tabulated value and it is not significant at 0.05 level. Hence the null hypothesis is accepted. (i.e.) type of school also makes no influences on Multiple Intelligence level of X standard higher achievers.

IV. RESULT AND DISCUSSION

There is a common belief that the urban students are highly exposed to various curricular, co-curricular and extra-curricular activities compared to the rural mass. But according to the research, it is found that the level of Multiple Intelligence is almost the same in the rural and urban area students. Similarly, the gender also does not influence much in their intelligence level. There is a living example that our Ex-president Dr. Abdul Kalam who is from rural background became a First citizen of our country and got great achievements in launching satellites. 14 year old Indian girl K.Vikashini of Palayamkottai, Tirunelveli is blessed with the exceptional IQ of nearly 225, can come up with solutions to the trickiest technical problems (Perachi Kannan, 18 Nov 2011, Vol 2 Issue 46, THE WEEKEND LEADER).

V. CONCLUSION

Hence, the study comes to a conclusion that the features like Locality, Gender, type of Education Institution, etc., does not interfere with the level of Multiple Intelligence, on a greater scale. The main factor of influence is identified with self-interest and commitment. Since the sample includes only the higher achievers and the result is as above.

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