

# Investigating the Diverse Forms of Intelligence Exhibited by Eighth Grade Students in English Medium Schools

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**Abstract:** This paper focuses on the necessity of examining various intelligences displayed by eighth graders in an English-medium school so as to demonstrate to the students the best career paths and various directions to improve their learning environments using the results obtained. The multiple intelligences idea, presented by Howard Gardner in 1983, is highlighted by the researcher for this purpose. This study's main objectives were to identify the students' various forms of multiple intelligence, to distinguish between the forms of intelligence that apply to students (male and female), and to compare the regions of intelligence between male and female eighth-graders English-medium school students.

The study employed a survey method using the standard tool the Multiple Intelligence Inventory (MIS-ASPS) developed by Surabhi Agarwal and Dr. Suraksha Pal, which has 90 items and 5 possible answers. A simple random sample procedure was used to select 100 girls and 100 boys from various schools in the city of Aurangabad for the study's 200 eighth-grade English-medium students. Researcher has discovered that eighth grade pupils demonstrate a high level of 'logical intelligence' among their many other intelligences.

Additionally, the study shows that while male students' logical intelligence is higher than female students', so is the later group's "interpersonal intelligence." When comparing the linguistic, spatial, bodily kinaesthetic, musical, intrapersonal, and naturalistic intelligence of female and male students in English medium schools, it was discovered that there is no significant difference between them. However, their interpersonal and logical intelligences differed significantly from one another.

**Key Words:** Forms of Intelligence, Eighth Grade Students, English Medium.

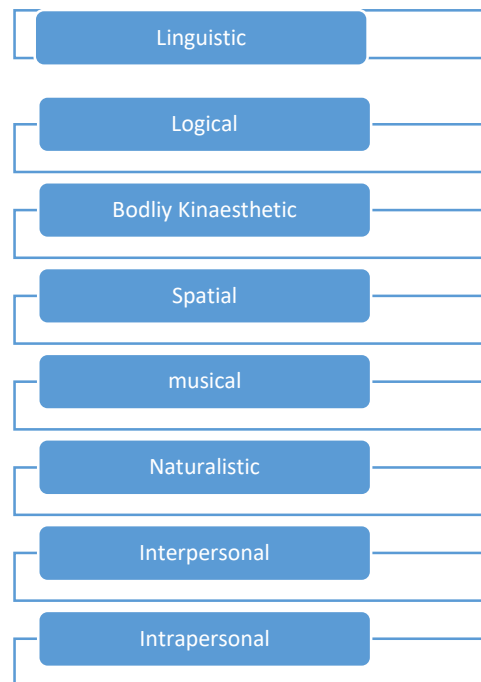
## 1. INTRODUCTION:

The term "intellect" is used to describe a variety of cognitive abilities, including problem-solving, memory, creativity, and emotional understanding. It also refers to the capacity to comprehend, learn, reason, and adapt to novel conditions. Intelligence, according to Gardner, is "a capacity or collection of abilities that enable a person to solve problems or create products significant in a particular cultural context." In his book "Frames of Mind," he also emphasizes that the ability to solve problems or create commodities that are valued within one or more cultural settings is intelligence. However, neither the origins of these capacities nor the appropriate methods of "testing" them are mentioned in this description. He then presents eight different criteria for intelligence, building on this description and particularly using biological and anthropological evidence.

Howard Gardner put up the "multiple intelligence" (MI) theory in 1983 to clarify the meaning of intelligence and to address the issue of whether techniques that purport to evaluate intelligence are actually scientific. In his view, a youngster who excels at multiplication is not always more intelligent than a child who finds it difficult. The second kid might be more powerful. Consequently, they may learn the material more effectively using a different method, excel in a subject other than mathematics, or even view the operation of multiplication on a fundamentally deeper level, which can cause them to appear slower than a child who learns the material quickly but has a higher potential for mathematical intelligence.

These variations "challenge an educational system that assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning," according to Gardner. In fact, as it is, our educational system greatly favors linguistic forms of instruction and assessment, as well as logical-quantitative modes to a lesser extent. Gardner asserts that a competing set of assumptions "is more likely to be educationally effective." Knowledge is acquired by students in clearly defined methods. Many students -- and even the entire society

-- would benefit if disciplines could be taught in a variety of methods and learning could be assessed using a variety of techniques. The various types of learning.



## 2. Need of the Study:

An investigation on how children learn using multiple intelligences was done in a preschool classroom by Sonia Mehta in 2002. The goal of this project is to better understand how kids learn when they participate in kid-initiated, teacher-led activities where their learning processes are recorded and analysed in light of how they use their multiple intelligences. The classroom interactions and behaviours of the children were observed, recorded, and interpreted using ethnographic approaches. The study was conducted in a classroom at the Virginia Tech Child Development Lab School, a preschool affiliated with the institution and open to the neighbourhood around it. The ideology of the lab school is based on social constructivist theory, according to the Virginia Tech Child Development Lab School Handbook from 2000.

According to research on multiple intelligence from various nations, little has been known about the various forms of intelligence displayed by eighth grade students in an English medium school, including how MI is applied in the classroom, how multiple intelligence is perceived by the individual, how MI theory applies to gifted learners, etc. In order to present secondary school pupils the best job paths and many directions to improve their learning conditions using the results acquired, the researcher felt the necessity to explore the varied areas of intelligence possessed by these students. It was crucial to perform the study for students of Aurangabad University because all previous studies had not specifically focused on the city.

### Operational definition of important terms:

- 1. Intelligence:** In this context, it refers to the score on multiple intelligence test developed by Surabhi Agarwal and Dr. Suraksha Pal.
- 2. Eighth graders:** Students in the eighth grade who are between the ages of 12 and 13 years old.
- 3. English-medium:** schools are those where English is the primary language of instruction.

### Purpose of the study:

The purpose of the research is to better investigate the many types of intelligence that eighth-grader students in English-medium schools display.

## 3. LITERATURE REVIEW:

Gulap Shahzada (2011) did a study to determine the extent of the kids in the Bannu district's self-perceived multiple intelligences. 714 students in all were chosen as a sample for the study using multistage sampling techniques that followed the proportion allocation strategy. The multiple intelligences inventory was employed as a research method in

the study and was modified from Armstrong's (1994) Urdu version. The mean and SD were used to measure, respectively, the multiple intelligences of the sampled students' central tendency and variability. The study's findings showed that the students' self-perceived verbal/linguistic, intrapersonal, interpersonal, naturalistic, and bodily kinaesthetic intelligences are the most predominate. It was suggested that teachers instruct in a way that allows children to grow in all areas of intellect. to identify the kids' strengths in their multiple intelligences.

Lucy Andria Tchuente, in the year 2023, recently designed a study on multiple intelligences. He came to the conclusion that every person has a special blend of intelligences. Before classifying someone as stupid, it is important to consider the possibility that they may not be in the ideal situation for completely realizing their potential. We may promote a more inclusive understanding of intelligence by accepting the idea of various intelligences.

#### 4. Objectives:

1. To find out the multiple intelligences of the eighth grade English-medium pupils..
2. To identify various forms of multiple intelligence in eighth-grade female English-medium pupils.
3. To determine different types of multiple intelligence that male eighth-grade English-medium students possess.
4. To examine the areas of intellect between eighth-grade pupils in English-medium schools who are male and female.

#### 4.1 Hypothesis:

1. The multiple intelligence of English-speaking eighth graders is high.
2. Female eighth-grade English-medium students have high levels of multiple intelligence.
3. The multiple intelligence of eighth-grade male English-medium pupils is average.
4. There is no significant difference between the genders of eighth-grade English-medium students in regard to their multiple intelligence.

#### 5. Methodology:

The study's methodology was survey approach. The multiple intelligence inventory developed by Surabhi Agarwal and Dr. Suraksha Pal which has 90 items and 5 alternate answers, was the standard tool the researcher employed for the current study.

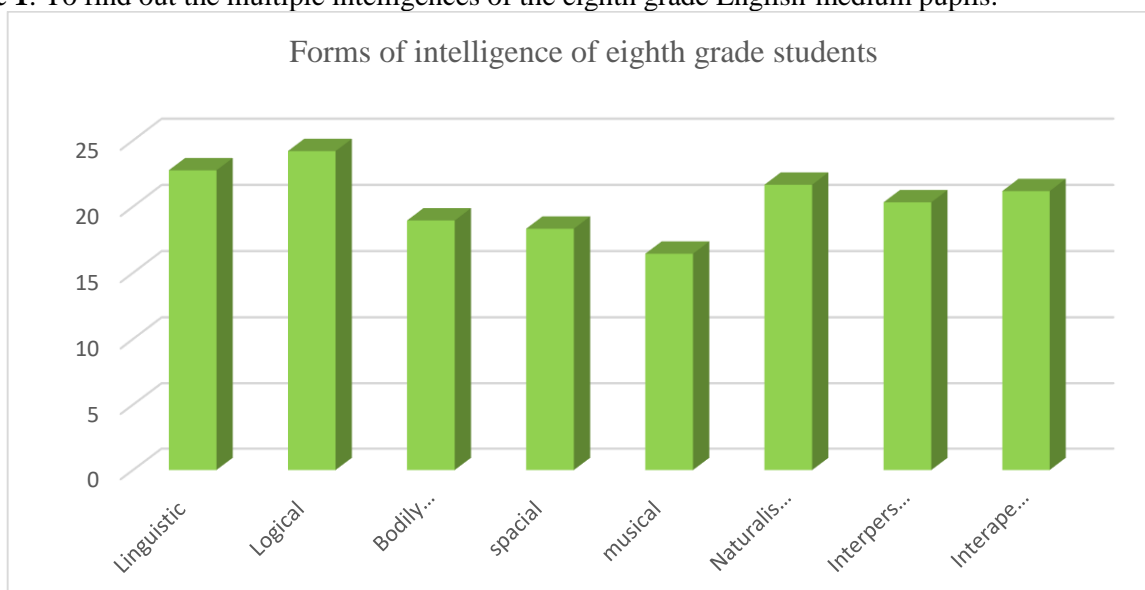
#### Sample:

In all, 200 eighth-grade English-medium participants in the current study were selected at random from five different schools of Aurangabad city, with 100 boys and 100 girls making up the sample.

**Statistical Measures:** For data analysis, t-test, mean, and SD are utilized.

#### Findings:

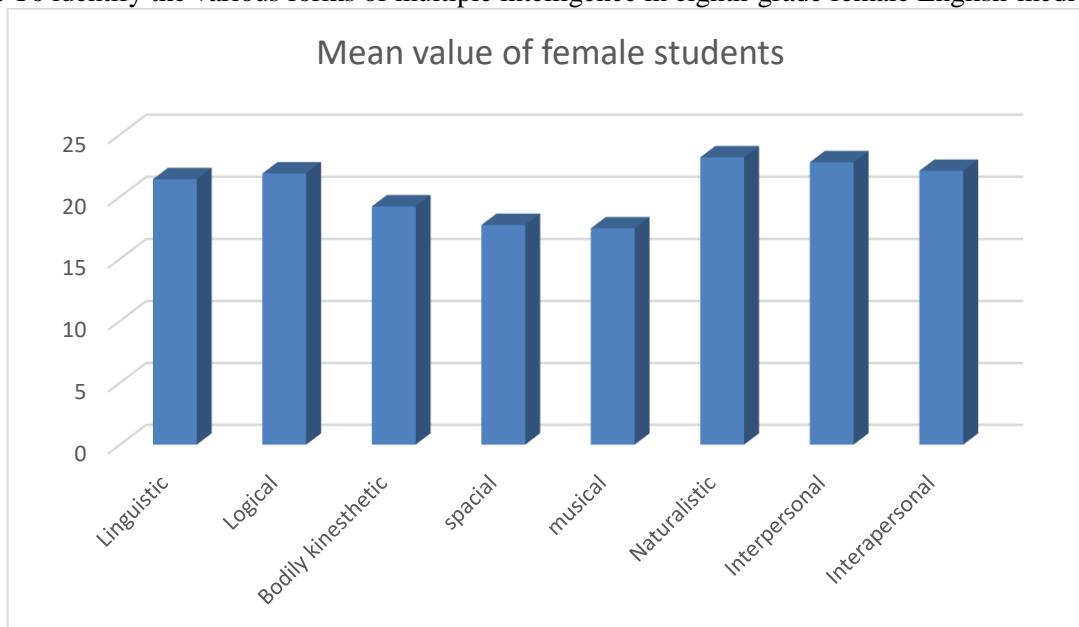
**Objective 1:** To find out the multiple intelligences of the eighth grade English-medium pupils.



Column diagram displaying the average value of several multiple intelligences

**Analysis and interpretation:** The results show that the average linguistic intelligence of eighth grade students in English medium schools is 22.07, the average logical intelligence is 23.03, the average bodily kinaesthetic intelligence is 19.08, the average spatial intelligence is 18.02, the average musical intelligence is 16.94, the average naturalistic intelligence is 22.01, the average interpersonal intelligence is 21.54, and the average intrapersonal intelligence is 21.62. The 'logical intellect' of eighth grade kids in English medium schools is therefore high.

**Objective 2:** To identify the various forms of multiple intelligence in eighth-grade female English-medium pupils.

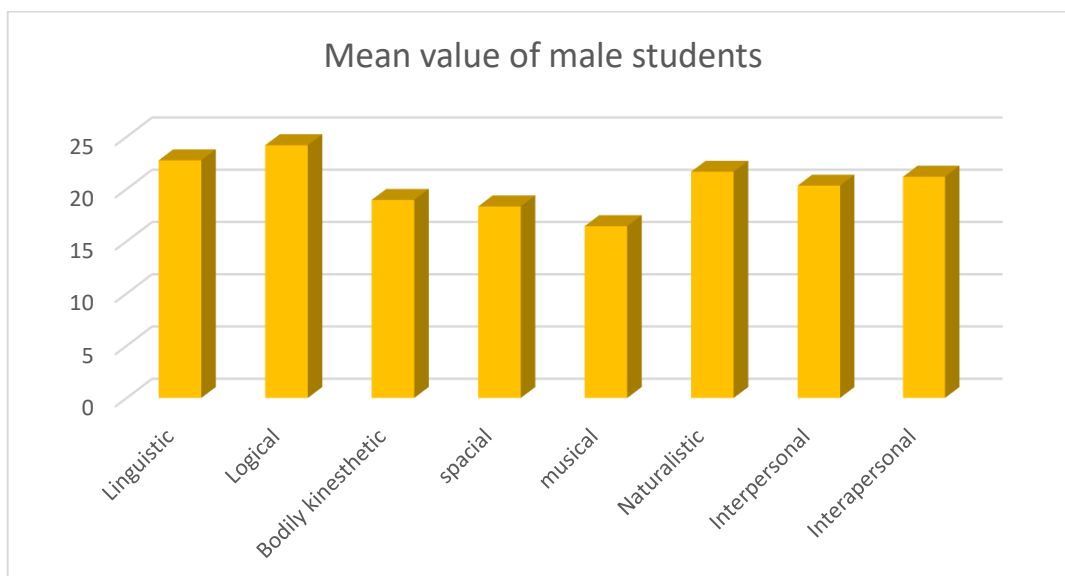


Column diagram displaying the average of the MI of female students

**Analysis and interpretation: -**

Results obtained show that eighth grade female pupils in English medium schools have a linguistic IQ mean of 21.41, logical IQ mean of 21.87, bodily kinesthetics IQ mean of 19.22. The average score for spatial intelligence is 17.72, the average score for musical intelligence is 17.45, the average score for interpersonal intelligence is 22.77, the average score for intrapersonal intelligence is 22.08, and the average score for naturalistic intelligence is 22.80. The naturalistic intelligence of female VIII STD students of English medium school is therefore high.

**Objective 3:** To determine different types of multiple intelligence that male eighth-grade English-medium students possess.



Column diagram showing mean value of male student's types of intelligence

**Analysis and Interpretation: -**

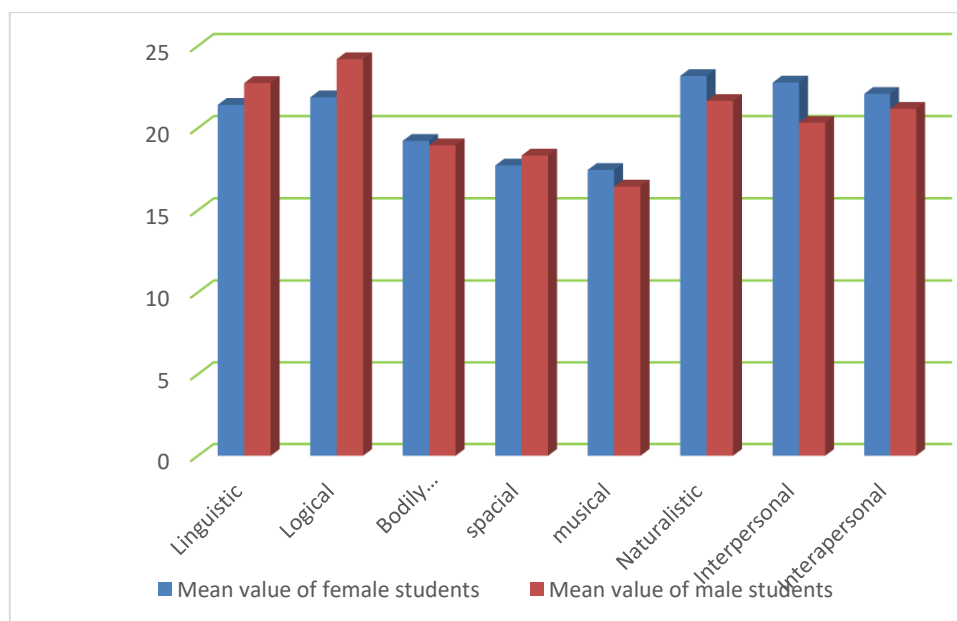
Results show that eighth grade male students of English-medium schools score on average at 22.74 for linguistic intelligence, 24.19 for logical intelligence, 18.95 for bodily kinaesthetic intelligence, 18.33 for spatial intelligence, 16.44 for musical intelligence, 21.22 for naturalistic intelligence, 20.32 for interpersonal intelligence, and 21.17 for intrapersonal intelligence. Therefore, the logical intelligence of male eighth graders in English medium schools is high.

**Objective 4:** To compare the areas of intellect of eighth-grade pupils in English-medium schools with respect to their gender.

Sr. No.	Types of intelligence	Gender	Mean	S.D	T- value	Difference between mean (.05 level)
1	linguistic	Girls	21.41	4.52	1.77	Not significant
		Boys	22.74	5.97		
2	Logical	Girls	21.87	6.39	2.43	<b>Significant</b>
		Boys	24.19	7.05		
3	Bodily kinesthetic	Girls	19.22	5.93	0.3	Not significant
		Boys	18.95	6.52		
4	Spatial	Girls	17.72	6.35	0.68	Not significant
		Boys	18.33	6.32		
5	Musical	Girls	17.45	7.54	0.92	Not significant
		Boys	16.44	7.93		
6	Naturalistic	Girls	22.80	6.49	1.58	Not significant
		Boys	21.22	7.58		
7	Interpersonal	Girls	22.77	7.19	2.44	<b>Significant</b>
		Boys	20.32	6.96		
8	Intrapersonal	Girls	22.08	7.61	0.82	Not significant
		Boys	21.17	8.00		

Table 1: S.D., t value, and gender differences

Comparison between female and male with respect to multiple intelligence



Comparison of various intelligences between male and female.

### Analysis and Interpretation: -

According to the results, male and female students' mean "linguistic intelligence" scores are 22.74 and 21.41 respectively, with S.D. values of 5.97 and 4.52. The T-Value is 1.77, which, at the 0.05 level, is less than the table value of 1.97. Thus, it demonstrates that in terms of linguistic intelligence, there is no significant difference between boys and girls.

Male and Female students' Mean "logical intelligence" scores are 24.19 and 21.87, respectively, with 7.05 and 6.39 as the standard deviations. The T-Value is 2.43, which, at the 0.05 level, is higher than the table value of 1.97. This shows that male students are significantly superior than female students in regard to their logical intelligence.

Male and Female students' Mean "bodily kinaesthetic intelligence" scores are 18.95 and 19.22, respectively, with standard deviations of 6.52 and 5.93 respectively. The T-Value is 0.30, which at the 0.05 level, is less than the table value of 1.97. Thus, it shows that there is no significant difference between boys and girls with respect to their bodily kinaesthetic intelligence.

The Mean score for "spatial intelligence" among students is 17.72 for girls and 18.33 for boys, with SD values of 6.35 and 6.32 respectively. The T-Value is 0.68, which, at the 0.05 level, is less than the table value of 1.97 which that when it comes to spatial intelligence intellect, boys and girls are similarly gifted.

The Mean score for "musical intelligence" among pupils is 17.45 for girls and 16.44 for boys, with standard deviations of 7.54 and 7.93. The T-Value is 0.92, which at the 0.05 level is less than the table value of 1.97. Thus, it demonstrates that Boys and girls have similar level of musical intelligence.

Male and female pupils' Mean "naturalist intelligence" scores are 21.22 and 22.80 respectively, with SD values of 7.58 and 6.49. The T-Value is 1.58, which at the 0.05 level is less than the table value of 1.97 indicating that there is no significant difference between boys and girls in terms of naturalistic intelligence.

Male and female pupils' Mean "interpersonal intelligence" scores are 20.32 and 22.77 respectively, with 6.96 and 7.19 as the standard deviations. The T-Value is 2.44, which at the 0.05 level exceeds the table value of 1.97. Thus, it demonstrates that there is a sizable disparity between the interpersonal intelligence of male and female students.

Girl pupils scored 22, 08 on the "intrapersonal intelligence" scale, while boys scored 21.17 on an average, with standard deviations 7.61 and 8.00 respectively. The T-Value is 0.82, which at the 0.05 level is smaller than the 1.97. Thus, it demonstrates that there is no significant difference between male and female students in terms of intrapersonal intelligence.

### 6. Discussion:

The obtained results show that eighth grade students in English medium schools have average intelligence', with mean values of 22.07 for linguistic intelligence, 23.03 for logical intelligence, 19.08 for Bodily kinaesthetic intelligence, 18.02 for spatial intelligence, 16.94 for musical intelligence, 22.01 for naturalistic intelligence, 21.54 for interpersonal intelligence, and 21.62 for intrapersonal intelligence.

Furthermore, results obtained show that eighth grade female students in English medium schools score on average 21.41 in linguistic intelligence, 21.87 in logical intelligence, 19.22 in bodily kinaesthetic intelligence, 17.72 in spatial intelligence, 17.45 in musical intelligence, 22.80 in naturalistic intelligence, 22.77 in interpersonal intelligence, and 22.08 in intrapersonal intelligence. The naturalistic intelligence of eighth grade female students in English medium schools is therefore high.

Results also show that eighth grade male students in English-medium schools score on average 22.74 for linguistic intelligence, 24.19 for logical intelligence, 18.95 for bodily kinaesthetic intelligence, 18.33 for spatial intelligence, 16.44 for musical intelligence, 21.22 for naturalistic intelligence, 20.32 for interpersonal intelligence, and 21.17 for intrapersonal intelligence. Therefore, the logical intellect of male eighth graders in English medium schools is high.

The logical intelligence and interpersonal intelligence of male and female pupils in English-medium schools, however, differ significantly, whereas the researcher found no significant difference between the linguistic intelligence, spatial intelligence, bodily kinaesthetic intelligence, musical intelligence, intrapersonal intelligence and naturalistic intelligence among female and male eighth grade students of English medium schools.



## 7. Results:

Investigating the many intelligence facets revealed that eighth grade pupils' level of 'logical intelligence' is high. Further the study shows that male students' logical intelligence is high while female students' "naturalistic intelligence" is strong. The eighth-grade male students are superior than female students in regard to their logical intelligence while female students are better than male students with respect to their interpersonal intelligence. There is no significant difference between the Mean linguistic intelligence, spatial intelligence, bodily kinaesthetic intelligence, musical intelligence, intrapersonal intelligence, and naturalistic intelligence of male and female students of English Medium High Schools.

## 8. Conclusion and recommendation:

Students should be conscious of the different types of diverse areas of intelligence they possess and choose the vocation or course that best suits to them. The knowledge of type of intelligence that each student possesses will enable the teacher to uncover their hidden talents and, using multiple intelligences (MI), tailor the instructional materials they receive to each student's unique learning style. Teachers should be aware of the specific intelligence that each student possesses in order to teach according to their diverse areas of multiple intelligence. Parents should encourage their children's work keeping in view their areas of intelligence without being overly rigid or unkind to them.

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