Multiple Intelligence of Secondary Schools' Students in the Context of Types of Family

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Abstract:

In present study, the researcher studied the multiple intelligence of the students of standard 9 from joint family and nuclear family. The researcher studied the effect of family type of multiple intelligence of students of standard 9. The researcher constructed and standardized The Multiple Intelligence Test. It was performed on the students of standard 9 of Ahmedabad city. The researcher selected 50 boys and 50 girls from joint family and 50 boys and 50 girls from nuclear family. The research revealed that the students of joint family possessed more multiple intelligence than that of the students of nuclear family. Moreover, it is also revealed that there was no effect of gender on the multiple intelligence of the students of joint family and nuclear family.

Keywords: *Multiple Intelligence, Family type*

1. Introduction

Howard Gardner first proposed the theory of multiple intelligence in 1983. This theory suggests that the traditional views of intelligence are too limited. Gardner proposed that there are eight different types of intelligences in human beings. While a person might be particularly strong in a specific area, such as music, sports, linguistic or any other field, it shows his intelligence in that specific field. Traditionally, schools have emphasized the development of logical intelligence and linguistic intelligence. While many students function well in this environment, there are those who do not. Gardner's theory argues that students will be better served by a broader vision of education, wherein teachers use different methodologies, exercises and activities to reach all students, not just those who excel at linguistic and logical intelligence. In present study, the researcher studied the multiple intelligence of the students of standard 9 in the context of family types.

2. Definitions of the Keywords

Multiple Intelligence

Gardner proposes eight authoritarian and authoritative intelligences to account for a broader range of human potential in children and adults.

These intelligences are:

- Linguistic intelligence ("word smart")
- Logical-mathematical intelligence ("number/reasoning smart")
- Spatial intelligence ("picture smart")
- Bodily-Kinaesthetic intelligence ("body smart")
- Musical intelligence ("music smart")
- Interpersonal intelligence ("people smart")
- Intrapersonal intelligence ("self-smart")
- Naturalist intelligence ("nature smart")
- Existential intelligence

3. Objectives of the study
1. To study the multiple intelligence of the students of standard 9.
2. To study the multiple intelligence of the students of standard 9 in the context of family types.

4. Variable of the study
1. Independent variables
A. Family types
(1) Joint family
(2) Nuclear family
B. Gender
(1) Boys
(2) Girls
2. Dependent variable
Scores of the multiple intelligence test

5. Hypotheses of the study
Ho_1 There is no significant difference between mean scores obtained in the multiple intelligence test of the students of joint family and nuclear family.

Ho_2 There is no significant difference between mean scores obtained in the multiple intelligence test of boys and girls of joint family.

Ho_3 There is no significant difference between mean scores obtained in the multiple intelligence test of boys and girls of nuclear family.

6. Importance of the study
The main objective of researcher was to study the multiple intelligence of the students of standard 9 in the context of their family type. The concept of multiple intelligence was first proposed by Howard Gardner. According to him, intelligence is not a single task but it is very comprehensive in which different types of intelligence interconnected to each other. Multiple intelligence acts a key role in the development of the secondary school students. The researcher had to perform this study on secondary school students. The researcher selected students of standard 9 to perform this study.

This study will help to know the students of standard 9 to know their multiple intelligence quotient number. This study will also help teachers and parents to improve multiple intelligence as well as their achievements in different fields of the students. The syllabus could be amended to improve multiple intelligence of students of standard 9.

7. Limitations of the study
The limitations of the present study are as follows.
1. This study was conducted on the students of standard 9 studying in schools of Ahmedabad city.
2. This study was conducted on students of joint and nuclear family.
3. The researcher has used self-constructed multiple intelligence test for this study.
4. The present study was performed on only Gujarati medium students.

8. Research method
In present study, the researcher had to study the multiple intelligence of the students of standard 9 in the context of their family type. The researcher selected sample of the students from Ahmedabad city. 200 students were selected in present study. The main objective of present study was to collect data using the multiple intelligence test from a vast mass. Therefore, the researcher used survey method for this study.

9. Population of the study

The population of present study was students of standard 9 of Ahmedabad city. The researcher selected 200 students from different schools of Ahmedabad city. Therefore, all the students studying in standard 9 of Ahmedabad city was the population of this study.

10. Sample of the study

The sample of study was as follows,

Table 1-Sample of the study

Family Type/Gender	Boys	Girls	Total
Joint	50	50	**100**
Nuclear	50	50	**100**
Total	100	100	**200**

Therefore, total 200 students in which 100 boys and 100 girls were chosen as sample for this study. 50 boys from joint family and 50 boys from nuclear family were selected as well as 50 girls from joint family and 50 girls from nuclear family were selected as a sample.

11. Tools of the study

For present study the researcher had used self-constructed multiple intelligence test. The test was standardized by founding its' reliability and validity. The final multiple intelligence test has MCQ types 70 items.

12. Data collection

The researcher used self-constructed multiple intelligence test for present study. This tool was given to the chosen sample of the students of standard 9 at a specific time. The researcher visited schools of the sample and met principals to convey them about present study. As per the time given by the principals the researcher again visited the schools one by one and test was given to the students. The students were given all details about how to compete the test. The students were given 1 hour and 30 minutes to complete this test. After the students were completed the test, the answer sheets were collected and used for the data analysis.

13. Statistical method of analysis

The researcher constructed some hypotheses and t-test was performed to analyse the hypotheses.

14. Testing of hypotheses

Ho$_1$: There is no significant difference between mean scores obtained in the multiple intelligence test of the students of joint family and nuclear family

Table 2-Mean, SD, SED and t-value of students of joint and nuclear family

Family	N	Mean	SD	SED	t Value
Joint	100	53.22	4.27		
Nuclear	100	49.19	4.85	0.65	6.24

df	0.05	0.01
198	1.96	2.58

Mean score of multiple intelligence test of students of joint family and nuclear family are 53.22 and 49.19 respectively. Standard deviations are 4.27 and 4.85 respectively. Standard error of deviation is 0.65. Calculated t value is 6.24.

For df=198, table t values are 1.96 at 0.05 level and 2.58 at 0.01 level. Calculated t value is more than table t value at both the levels. Therefore, hypothesis is rejected and there is a significant difference between mean scores obtained in multiple intelligence test by students from joint family and nuclear family.

Moreover, mean score of students of joint family is more than that of students of nuclear family. Thus, it is revealed that the multiple intelligence of students of joint family is higher than the multiple intelligence of students of nuclear family.

Ho2: There is no significant difference between mean scores obtained in the multiple intelligence test of boys and girls of joint family.

Table 3-Mean, SD, SED and t-value of boys and girls of joint family

Joint family	N	Mean	SD	SED	t Value
Boys	50	53.73	4.11		
Girl	50	52.88	4.42	0.60	1.41

df	0.05	0.01
98	1.98	2.63

Mean score of boys and girls are 53.73 and 52.88 respectively. Standard deviation of boys and girls are 4.11 and 4.42 respectively. Standard error of deviation is 0.60. Calculated t value is 1.41.
For df=98, table t values are 1.98 at 0.05 level and 2.63 at 0.01 level. Calculated t value is less than table t value at both the levels. Therefore, hypothesis is not rejected and there is no significant difference between mean scores obtained in multiple intelligence test by boys and girls of joint family. It means, the boys and girls of joint family have equal multiple intelligence.

Ho3:There is no significant difference between mean scores obtained in the multiple intelligence test of boys and girls of nuclear family

Table 4-Mean, SD, SED and t-value of boys and girls of nuclear family

Nuclear family	N	Mean	SD	SED	t Value
Boys	50	51.25	4.17		
Girl	50	50.63	4.22	0.59	1.05
df	0.05	0.01			
98	1.98	2.63			

Mean score of boys and girls are 51.25 and 50.63 respectively. Standard deviation of boys and girls are 4.17 and 4.22 respectively. Standard error of deviation is 0.59. Calculated t value is 1.05.
For df=98, table t values are 1.98 at 0.05 level and 2.63 at 0.01 level. Calculated t value is less than table t value at both the levels. Therefore, hypothesis is not rejected and there is no significant difference between mean scores obtained in multiple intelligence test by boys and girls of nuclear family. It means, the boys and girls of nuclear family have equal multiple intelligence.

15. Finding of the study
1. The students of joint family have higher multiple intelligence than the students of nuclear family.
2. The boys and girls of joint family have equal multiple intelligence.
3. The boys and girls of nuclear family have equal multiple intelligence.

16. Conclusion

The main objective of present study was to study the multiple intelligence of the students of standard 9 in the context of joint and nuclear family. The researcher selected 100 students from joint family and 100 students from nuclear family from Ahmedabad city. The researcher used self-constructed Multiple Intelligence Test. After study, it was revealed that the students from joint family have higher multiple intelligence than that of the students from nuclear family. There was no significant difference between the multiple intelligence of boys and girls.

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