

## A Study Of Differences In Intelligence, Family Climate, School Environment, Study Habits And Academic Achievement Of Students In Vidarbha Region In Relation To Area And Sex

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### Abstract

*The investigator of the study found that there is significant differences in Intelligence, Family climate, School environment, Study habits and Academic achievement of Secondary school students of urban and rural areas with respect to sex.*

**Key words:** Intelligence, Family climate, School environment, Study habits and Academic achievement.

### Need Of The Study :

Every individual may differ from other in terms of Knowledge, environment, and genetic factors. Intelligence, Family climate, School environment, Study habits and Academic achievement of secondary school students may differ from sex to sex and region to region and person to person. The impact of modern devices playing vital role in establishment of educational environment by influencing parents, teachers, and students and has changed study habits, and in turn Academic achievement of students. But the question arises in which area and on which sex the modernization of school and families will affect the Intelligence, Academic achievement and study habits of students.

#### Intelligence:

Intelligence provides insight and direction to human potential to achieve goal . Intelligence is related to the process of mental mechanism , which is the best way to increase scholastic achievement of children . Children who possess high scores are not necessarily more intelligent than the children who possess low scores . Galton [1822 – 1911] believed that intelligence is a function of psycho-physical abilities . Binet and simon [1916] describe intelligence is a function of the ability to learn within an academic settings . Intelligence is the ability to learn from ones experiences , aquire knowledge and use resources to adopt to new situations [Sternberg and Kaufman, 1998; Wechsler , 1975] .

#### Family climate :

Family plays a very significant role in the all round development of a child. Parent-child

interaction and parents way to deal with their children develop certain attitudes among the children towards their homeenvironment . The word ‘Climate’ is a more comprehensive one . It includes within itself the word ‘Environment’ . It embraces the social , physical and emotional activities of the family . All these combine together constitute the family climate . Family climate means an interpersonal relationship between the parents and the child.

#### Study habits :

Study habits refer to a set of behaviours related to how students organize their time and space to promote systematic study Behavior . It means that the student must be able to organize, classify and arrange facts in their proper relationship to the subject being studied . Study habits basically consist of effective study [ Sorenson, 1954 ] and also include students habit of concentration , note-making , time budgeting and study methods (Smith, 1967).

#### School Environment :

Next to family the school is the most important experience in the process of child development . It may have direct impact on the cognitive and affective behaviors of students . School environment may include dimensions like creative stimulation , Acceptance , Rejection and control . The positive learning environment in school will help to maximize the learning of every student, helps children and youth become full participating citizens of society and helps to build a sense of community.

**Academic Achievement :**

Achievement is a progress that a learner makes in learning ,often measured by either standerdised or teacher made test.Therefore ,academic achievement is knowledge acquired and skills developed in a school subject generally indicated by marks obtained in tests. Wolman Benjumin B (1973)defined academic achievement as the degree or level of proficiency attained in scholastic or academic work.

**Objectives :**

1. To study the difference between Intelligence of male and female secondary school students of rural and urban areas of Vidarbha region.
2. To study the difference between Family climate of male and female secondary school students of rural and urban areas of Vidarbha region.
3. To study the difference between School environment of male and female secondary school students of rural and urban areas of Vidarbha region.
4. To study the difference between Study habits of male and female secondary school students of rural and urban areas of Vidarbha region.
5. To study the difference between Academic achievement of male and female secondary school students of rural and urban areas of Vidarbha region.

**Hypothesis :**

1. There is no significant difference between Intelligence of male and female secondary school students of rural and urban areas of Vidarbha region.
2. There is no significant difference between Family climate of male and female secondary school students of rural and urban areas of Vidarbha region.
3. There is no significant difference between School environment of male and female secondary school students of rural and urban areas of Vidarbha region.
4. There is no significant difference between Study habits of male and female secondary school students of rural and urban areas of Vidarbha region.
5. There is no significant difference between Academic achievement of male and female

secondary school students of rural and urban areas of Vidarbha region.

**Methodology :**

Descriptive survey method was applied in this study.

**Sample ;**

For the study 800 students of VIII<sup>th</sup> and IX<sup>th</sup> standard from secondary schools out of which 400 from rural areas while 400 from urban areas of Vidarbha region were selected.

Sr. no	Type of area	No.of students	Gender		Total
			Boys	Girls	
1	Urban	400	200	200	400
2	Rural	400	200	200	400

**Tools :**

For the study following tools had been employed.

1. Study habits inventory.(S.H.I.)
  - M. Mukhopadhyaya and D.N.Sansanwala
2. Family climate scale(F.C.S.)
  - Dr.Beena Shah.
3. School environment Inventory
  - Dr. Karuna Shanar Mishra
4. Group test of intelligence (GT.I.)
  - Dr. Tondon
5. Annual examination scores of students of standard VIII<sup>th</sup> and IX<sup>th</sup> were taken as an index of Academic Achievement.

**Procedure for data collection ;**

For the purpose of data collection , good rapport was established with students by explaining the objectives of the study. The data were collected by administering the selected tools for present study.

**Statistical techniques ;**

The main statistical techniques used in the analysis of data were

1. Mean
2. S.D
3. 't' value

**Analysis and interpretation of data ;**

**Hypothesis : 1.**

There is no significant difference between Intelligence of male and female secondary school students of rural and urban areas of Vidarbha region.

**Table 1 - Area wise difference in Intelligence of Secondary school students**

Area	Sex	N	Mea n	S.D	t value	remark
Rural	Boys	20	37.32	7.21	4.15*	Sig
	Girls	20	33.66	10.17		
Urban	Boys	20	57.38	15.53	5.74*	Sig
	Girls	20	48.66	14.90		
	Boys	40	47.35	15.72		
	Girls	40	41.16	14.79	5.78*	Sig

**Interpretation :**

It is evident from the table that there exists significant difference in the mean scores of boys and girls with respect to their Intelligence. There exists significant difference in the mean scores of rural and urban students with respect to their Intelligence. Boys of both areas have greater mean of Intelligence as compared to girls.

**Hypothesis 2.**

There is no significant difference between Family climate of male and female secondary school students of rural and urban areas of Vidarbha region.

**Table 2. Area wise difference in Family climate of Secondary school students**

Area	Sex	N	Mea n	S.D	t value	remark
Rural	Boys	20	27.92	6.78	4.46*	Sig
	Girls	20	31.49	9.17		
Urban	Boys	20	31.96	7.72	0.37*	NS
	Girls	20	31.65	8.74		
	Boys	40	29.94	7.53		
	Girls	40	31.57	8.94	2.79*	Sig

**Interpretation :**

It is evident from the table that there exists significant difference in the mean scores of rural boys and girls with respect to their School environment. There exists no significant difference in the mean scores of urban boys and girls with respect to their School environment. Boys and girls of secondary school level differ significantly in their School environment.

**Hypothesis 4.**

There is no significant difference between Study habits of male and female secondary school students of rural and urban areas of Vidarbha region.

**Table 4- Area wise difference in Study habits of Secondary school students**

Area	Sex	N	Mea n	S.D	t value	remark
Rural	Boys	20	108.16	9.69	05.34*	Sig
	Girls	20	116.71	20.45		
Urban	Boys	20	137.69	26.20	03.57*	Sig
	Girls	20	147.45	28.50		
	Boys	40	122.92	24.65		
	Girls	40	132.08	29.17	4.82**	Sig

**Interpretation :**

It is evident from the table that there exists significant difference in the mean scores of boys and girls with respect to their Study habits.

There exists significant difference in the mean scores of rural and urban students with respect to their Study habits. Girls of both areas have greater mean of Study habits as compared to boys.

**Hypothesis 5.**

There is no significant difference between Academic achievement of male and female secondary school students of rural and urban areas of Vidarbha region.

**Table 5. Area wise difference in Academic achievement of Secondary school students.**

Area	Sex	N	Mean	S.D	t value	remark
Rural	Boys	20	582.86	54.16	0.38	NS
	Girls	20	580.65	60.65		
Urban	Boys	20	676.78	59.89	9.57*	Sig
	Girls	20	610.32	77.85		
	Boys	40	629.81	73.91		
	Girls	40	595.48	71.40	6.68*	Sig

**Interpretation :**

It is evident from the table that there exists no significant difference in the mean scores of rural boys and girls with respect to their Academic achievement.

There exists significant difference in the mean scores of urban boys and girls with respect to their Academic achievement.

Boys of urban areas have greater mean of Academic achievement as compared to other three categories.

**Conclusions :**

1. Secondary school students differ in their Intelligence. Rural boys and girls do not differ significantly in Intelligence, here as this difference is more in case of urban boys and girls.
2. Secondary school students differ significantly in their Family climates, girls of rural and urban areas have better Family climate as compared to boys.
3. Secondary school students differ significantly in their School environment. Girls of rural areas have better scores of School environment as compared to boys.
4. Secondary school students differ in their Study habits, girls of both areas are better in Study habits as compared to boys.
5. Secondary school students differ in their Academic achievement, rural boys and girls do

not differ in their Academic achievement, where as urban boys and girls show more difference in their Academic achievement. Boys of urban areas have greater mean of Academic achievement as compared to other three categories.

**Educational implications**

The study reveals that the findings have important implication, which are more meaningful for teachers and parents. The parents and schools need to be updated regarding the low study habits among students and develop a strategy in schools so that proper study habits can be developed among students. In order to increase Academic achievement, school should provide better environment. From the study it is observed that girls from rural areas are more comfortable with school environment than boys. Hence special care to be needed by teachers in attending the problems of boys.

**Suggestions for further research**

1. This study can be repeated with other tools for jr.college, University levels.
2. This study can be repeated with private (non-aided) school students.
3. A study of relationship between Intelligence and School environment of residential and non residential schools can be undertaken.

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