

# A STUDY OF ENVIRONMENTAL AWARENESS OF THE STUDENT OF THE HIGHER SECONDARY SCHOOLS OF AHMEDABAD CITY

**Ms. Bindu Kumari, Prof. (Dr.) Parveenbanu M. Malek**

PhD Scholar, Gujarat University, Ahmedabad  
mbindu84@gmail.com

HOD, Chaudhari M.Ed. College, Gandhinagar  
prin.chaudharimedcollege@gmail.com

## **Abstract**

*This study investigates the level of environmental awareness among students in higher secondary schools within Ahmedabad City. The primary objectives are to assess students' knowledge of environmental issues, their attitudes toward environmental conservation, and the extent of their engagement in environmentally friendly practices. The research employs a mixed-methods approach, combining surveys and interviews to gather quantitative and qualitative data. A representative sample of students from various higher secondary schools in Ahmedabad is included in the study. Preliminary findings reveal a moderate level of environmental awareness among the student population, with variations observed across different schools and demographics. The study identifies key factors influencing environmental awareness, including educational curriculum, extracurricular activities, and community involvement. Additionally, the research explores the correlation between environmental awareness and students' willingness to adopt sustainable behaviors. The study concludes with recommendations for enhancing environmental education programs in higher secondary schools, emphasizing the importance of integrating practical initiatives and community engagement to foster a more comprehensive understanding of environmental issues. The findings contribute to the ongoing discourse on environmental education, highlighting areas for improvement in promoting sustainable attitudes and behaviors among the youth in Ahmedabad City.*

**Keywords:** Ahmedabad City, Environmental Awareness, Higher Secondary Schools, Students, Study

## **INTRODUCTION**

This study explores the environmental awareness of higher secondary school students in Ahmedabad City. In a rapidly evolving urban landscape, understanding the knowledge, attitudes, and the practices of students regarding environmental issues is crucial. The research aims to assess their baseline knowledge, attitudes, and eco-friendly practices. By conducting a comprehensive survey, the study seeks to provide insights that can inform targeted interventions, shaping a more environmentally conscious youth in Ahmedabad.

Environmental awareness is a critical component of fostering a sustainable and ecologically responsible society. As the global community grapples with pressing environmental challenges, it becomes imperative to assess the level of environmental awareness among the younger generation, who will play a pivotal role in shaping the future. This study aims to investigate the environmental awareness of students attending higher secondary schools in Ahmedabad City, exploring their knowledge, attitudes, and practices concerning environmental issues. Ahmedabad, a vibrant and rapidly growing city in India, serves as an intriguing backdrop for this research. As urbanization and industrialization continue to reshape the landscape, understanding the environmental consciousness of the youth in this setting becomes crucial for developing targeted educational programs and policies. The objectives of this study are multifaceted. Firstly, the research seeks to assess the baseline knowledge of higher secondary school students in Ahmedabad regarding various environmental issues such as climate change, pollution, biodiversity, and resource conservation. Secondly, the study aims to gauge the attitudes of students towards environmental concerns, evaluating their perception of the severity and urgency of these issues. Finally, the research endeavors to explore the eco-friendly practices adopted by students in their daily lives, shedding light on their commitment to sustainable living. The methodology involves a comprehensive survey conducted among a representative sample of higher secondary school students in Ahmedabad. The survey instrument is designed to capture a nuanced understanding of students' awareness levels, attitudes, and behaviors related to the environment. Statistical analysis of the collected data will provide insights into the overall environmental awareness profile of the student population. The findings of this study are anticipated to contribute valuable information to educational institutions, policymakers, and environmental advocacy groups. By identifying gaps in environmental knowledge and highlighting areas for improvement, the research aims to inform the development of targeted interventions that can enhance environmental education in higher

secondary schools. Ultimately, fostering a generation of environmentally conscious individuals is key to addressing and mitigating the complex environmental challenges facing our planet.

## OBJECTIVES

The present study has the following major objectives:

1. To study the level of environmental awareness of Higher Secondary Schools students of Ahmedabad city.
2. To study the environmental awareness of Higher Secondary School students of Ahmedabad city with respect to gender.
3. To study the environmental awareness of Higher Secondary School students of Ahmedabad city with respect to area.

### Variables:

**Table-1**  
**Types of variables and it's level**

SR. NO.	TYPES OF VARIABLES	VARIABLES	LEVEL
1.	Dependent	Environment Awareness	-----
2.	Independent	Gender	1. Boys 2. Girls
3.	Independent	Area	1. East 2. West

### Hypotheses:

In present study the major hypotheses are:

**H<sub>01</sub>** There is no significant difference between the mean scores of environmental awareness test of the students of the Higher Secondary Schools of east and west areas of Ahmedabad city.

**H<sub>02</sub>** There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of Ahmedabad city.

**H<sub>03</sub>** There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of the East area of Ahmedabad city.

**H<sub>04</sub>** There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of the West area of Ahmedabad city.

**H<sub>05</sub>** There is no significant difference between the mean scores of environmental awareness test of the Boys of Higher Secondary Schools of East and West areas of Ahmedabad city.

**H<sub>06</sub>** There is no significant difference between the mean scores of environmental awareness of the Girls of Higher Secondary Schools of East and West areas of Ahmedabad city.

### Research Method:

Descriptive Research provides information about currently occurring conditions, situations, and events. The main objective of this type of research is to describe the data and characteristics that are being studied. This type of research is also called Statistical Research.

Descriptive Research method classified into three categories:

- Case study method
- Observational method
- Survey method

In the present study, Descriptive method of which survey method is used. In applied social research, the Survey Method is one of the most common, popular and widely used methods.

### Sampling Method:

Among the two sampling methods: probability sampling and non-probability sampling, the researcher has used stratified random sampling and cluster sampling method which comes under probability sampling.

### Stratified Random Sampling Method:

In the present study the sample has been divided into strata. The first strata is divided into east and west areas, while the second strata is divided as boys and girls students. Next, the researcher has used a lottery method to randomly select three schools from the east area and three schools from the west area.

In cluster sampling, the sample units contain groups of clusters instead of individual members in the population. Here groups are formed and selection is done randomly from these groups So, In the present study researcher has applied stratified random sampling and cluster sampling method and has taken a sample of 326 students.

**TABLE-2**  
**List of Schools Area and number of students**

SR. NO.	NAME OF SCHOOL	AREA	BOY	GIRL	NO. OF STUDENTS
1	H. B. Kapadia	East	50	60	110
2	Jay Ambe School	East	23	25	48
3	St. Blaze English School	East	7	4	11
4	Gayatri Higher Secondary School	West	30	17	47
5	M. K. School	West	33	25	58
6	Ambika School	West	18	34	52
<b>Total</b>			161	165	326

**Research Tool:**

The choice and use of data collection tools are crucial in research and depend on the study. Selected tools must be reliable and valid. Educational research uses various tools for quantitative and qualitative data, utilizing available ones or creating new tools as needed.

In the present study, to know the environmental awareness of Higher Secondary School students of Ahmedabad city researcher used the tool called Environmental Awareness Test prepared by R. S. Patel. It is a 5-point rating scale tool in which the total number of questions is 36 out of which 21 questions are positive and 15 questions are negative. The highest score can be 144 and lowest can be 0. The reliability of the tool is 0.81. The list of positive and negative statements is shown in TABLE 3.

**TABLE 3**  
**Statement Analysis Table**

SR. NO.	TYPE OF STATEMENT	STATEMENT NO.
1	Positive Statement	1,2,3,4,5,6,9,15,16,17,18,21,22,23,26,27,30,31,33,35,36
2	Negative Statement	7,8,10,11,12,13,14,19,20,24,25,28,29,32,34

**Procedure of Data Collection:**

For present study researcher have used “t-test” to analyze the collected data. Data which were collected through the questionnaire method were organized and tabulated by statistical methods like parametric and non-parametric tests. The entire procedure of data analysis has been presented in tabular form. The researcher aims to present the qualitative analysis of data, which has been collected in an organized form during the research study. According to the objective of this study, the organization of data has been done. The data is interpreted objective-wise.

For the present study, Researcher have done interpretation of a 5-point rating scale according to the appropriate options of the particular methods, techniques, skills etc.

For the present study, researcher have collected a total 343 data from the targeted sample in which 17 data had some error. So finally, after removing such inappropriate data a total 326 final samples have been selected.

**Technique for Data Analysis:**

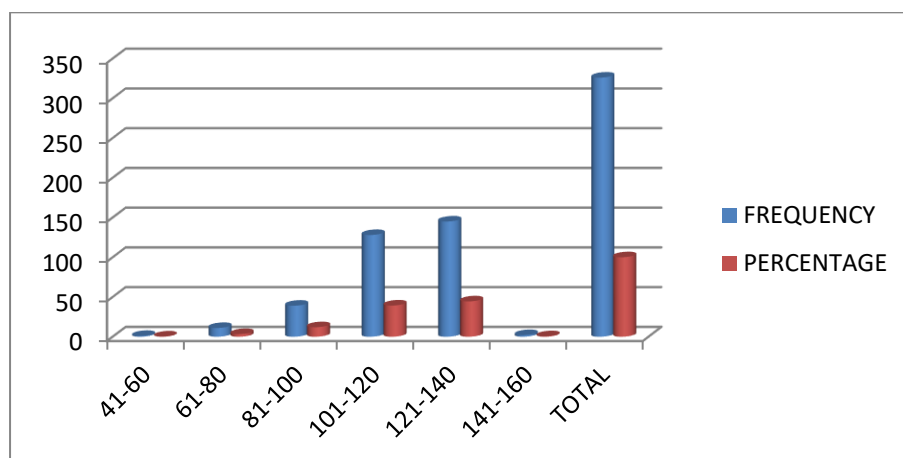
**Classification of Environmental Awareness of Higher Secondary School Students of Ahmedabad city.**

In the present research, the researcher collected environmental awareness data through sampling of Higher Secondary School students of Ahmedabad city and conducted statistical analysis. TABLE 4 shows the frequency distribution for environmental awareness test scores of Higher Secondary School students.

**TABLE 4**  
**Frequency Distribution and Percentage Calculation of environmental awareness test scores of Higher Secondary School Students of Ahmedabad City**

CLASS	FREQUENCY	PERCENTAGE
41-60	1	0.31
61-80	11	3.37
81-100	39	11.96
101-120	128	39.26
121-140	145	44.48
141-160	2	0.62
<b>TOTAL</b>	<b>326</b>	<b>100.00</b>

Total numbers of items were 36 with a maximum score of 4 each. The maximum possible score was 144 and the minimum possible score was 0. In table 4, the scores were categorized into six classes. Classification of environmental awareness scores shows that the highest percentage of the sample, 44.48% was in the class 121-140, and the lowest percentage of the sample, 0.31% was in the class 41-60. Calculation of maximum and minimum score was done with the help of MS- Excel.



**GRAPH 1**  
**Classification of Environmental Awareness scores level of Higher Secondary School Students of Ahmedabad City.**

**TABLE 5**  
**Classification of the level of environmental awareness of Higher Secondary School students of Ahmedabad City**

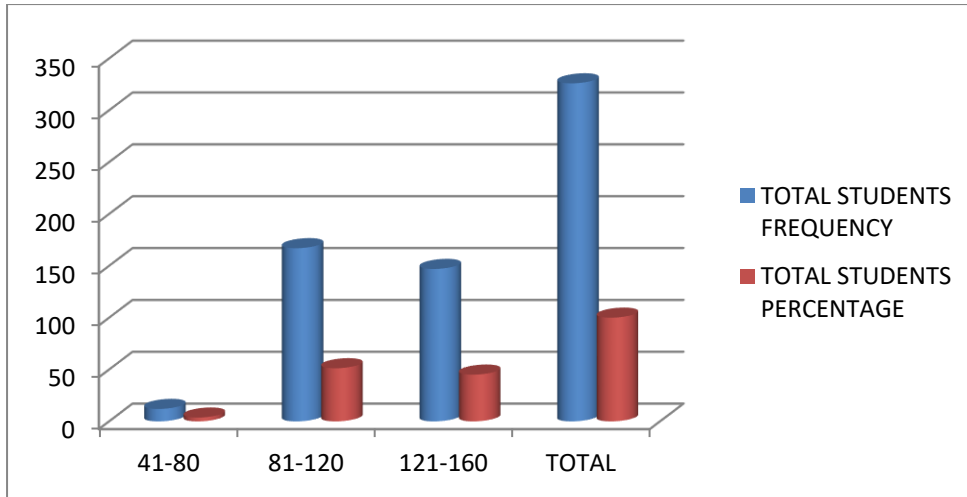
<b>41-80</b>	Low Level
<b>81-120</b>	Medium Level
<b>121-160</b>	High Level

TABLE 5 shows class 121-160 in high level, 81-120 in medium level and 41-80 in low level.

**TABLE 6**  
**Classification of Environmental Awareness scores frequency and percentage of Higher Secondary School Students of Ahmedabad City.**

CLASS	FREQUENCY	PERCENTAGE
<b>41-80</b>	12	3.68
<b>81-120</b>	167	51.23
<b>121-160</b>	147	45.09
<b>TOTAL</b>	<b>326</b>	<b>100.00</b>

From TABLE 6, we can say that the students falling between classes 41-80 are 3.68 percentages in number which shows that the students have a lower level of environmental awareness. Similarly, the students falling between the class 81-120 are 51.23 percentages in number which shows that these students have a medium level of environmental awareness. In the same manner, students falling between classes 121-160 are 45.09 percentages in number which shows that these students have higher levels of environmental awareness. Thus, by looking at TABLE 6, we can say that the level of environmental awareness scores of frequencies and percentage of most of the Higher Secondary students of Ahmedabad city is of medium level.



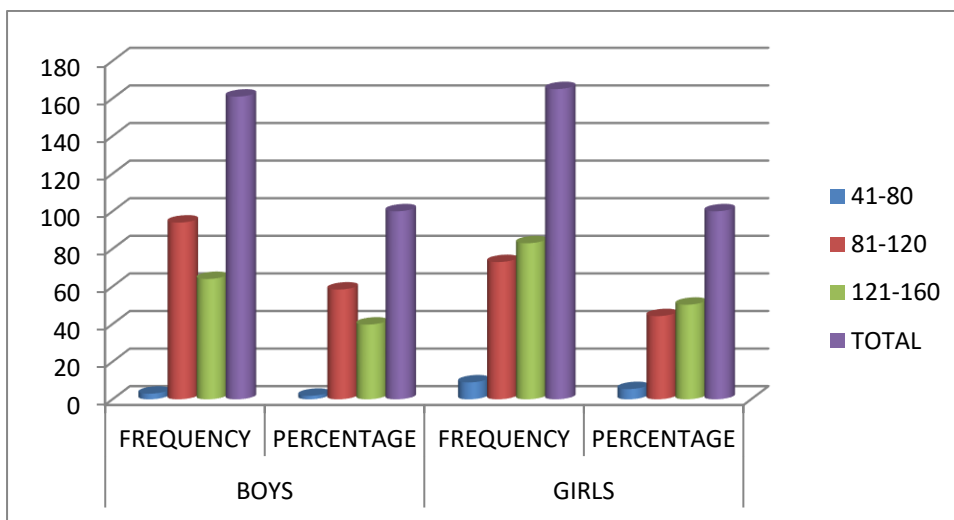
**GRAPH-2**  
Classification of Environmental Awareness test scores frequency and percentage of Higher Secondary school students of East and West Areas of Ahmedabad City

**TABLE-7**  
Classification of Environmental Awareness test scores frequency and percentage of Boys and Girls of

	BOYS		GIRLS	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
41-80	3	1.86	9	5.45
81-120	94	58.39	73	44.24
121-160	64	39.75	83	50.31
<b>TOTAL</b>	<b>161</b>	<b>100</b>	<b>165</b>	<b>100</b>

Higher Secondary Schools of Ahmedabad City.

From the TABLE-7, we can say that 1.86 percent of boys of higher secondary schools show low level of environmental awareness followed by 58.39 percent boys of higher secondary schools show medium level and 39.75 percent boys of higher secondary schools show higher level of environmental awareness. In the same manner, 5.45 percent girls of higher secondary schools show low level, 44.24 percent show medium level and 50.31 percent girls of higher secondary schools show higher level of environmental awareness. So, by looking at the table, we can say that the environmental awareness level of girls of higher secondary schools is higher and the environmental awareness of boys of higher secondary schools is medium.

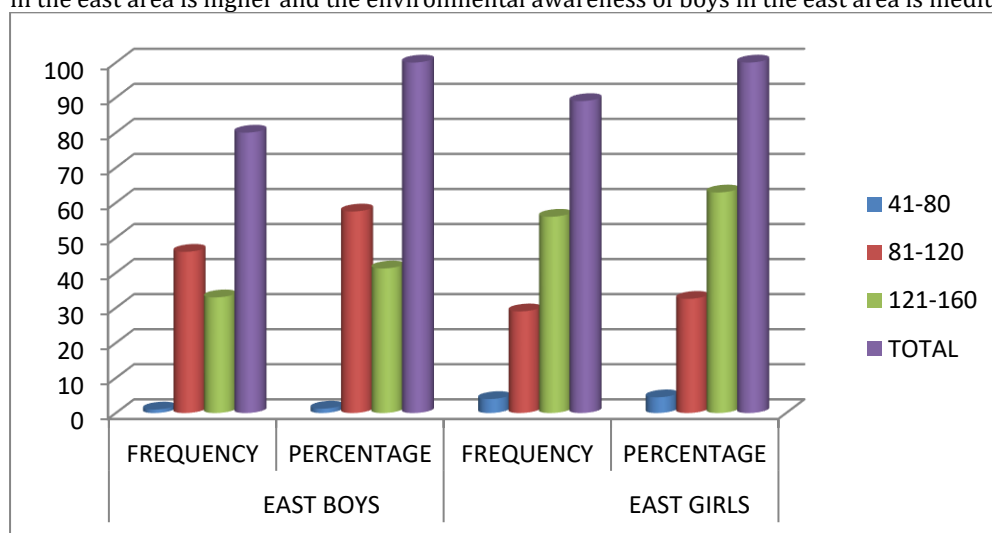


**GRAPH 3**  
Classification of Environmental Awareness test scores frequency and percentage of Boys and Girls of Higher Secondary Schools of Ahmedabad City.

**TABLE-8**  
**Classification of Environmental Awareness test scores frequency and percentage of Boys and Girls of the East Area of Ahmedabad City.**

	EAST BOYS		EAST GIRLS	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
41-80	1	1.25	4	4.49
81-120	46	57.5	29	32.58
121-160	33	41.25	56	62.93
<b>TOTAL</b>	<b>80</b>	<b>100</b>	<b>89</b>	<b>100</b>

From the TABLE 8 we can say that 1.25 percent of boys of the east area show low level of environmental awareness scores followed by 57.5 percent boys of east area show medium level and 41.25 percent boys of east area show higher level of environmental awareness. In the same manner, 4.49 percent girls of east area show low level, 32.58 percent show medium level and 62.93 percent girls of east area show higher level of environmental awareness. So by looking at the table, we can say that the environmental awareness level of girls in the east area is higher and the environmental awareness of boys in the east area is medium.

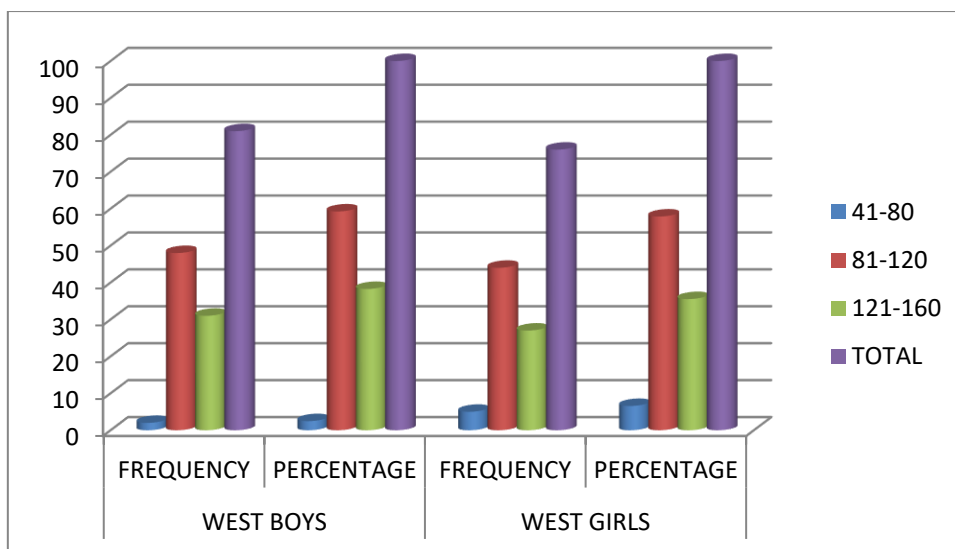


**GRAPH-4**  
**Classification of Environmental Awareness test scores frequency and percentage of Boys and Girls of East Area of Ahmedabad City.**

**TABLE-9**  
**Classification of Environmental Awareness test scores frequency and percentage of Boys and Girls of West area of Ahmedabad City.**

	WEST BOYS		WEST GIRLS	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
41-80	2	2.47	5	6.58
81-120	48	59.26	44	57.89
121-160	31	38.27	27	35.53
<b>TOTAL</b>	<b>81</b>	<b>100</b>	<b>76</b>	<b>100</b>

From the TABLE 9, we can say that 2.47 percent boys of the west area show a low level of environmental awareness followed by 59.26 percent boys of west area show medium level and 38.27 percent boys of west area show higher level of environmental awareness. In the same manner, 6.58 percentage girls of west area show low level of environmental awareness, 57.89 percentage girls of west area show medium level and 35.53 percentage girls of west area show higher level of environmental awareness. So, both boys and girls in the west area have a medium level of environmental awareness.



**GRAPH 5**

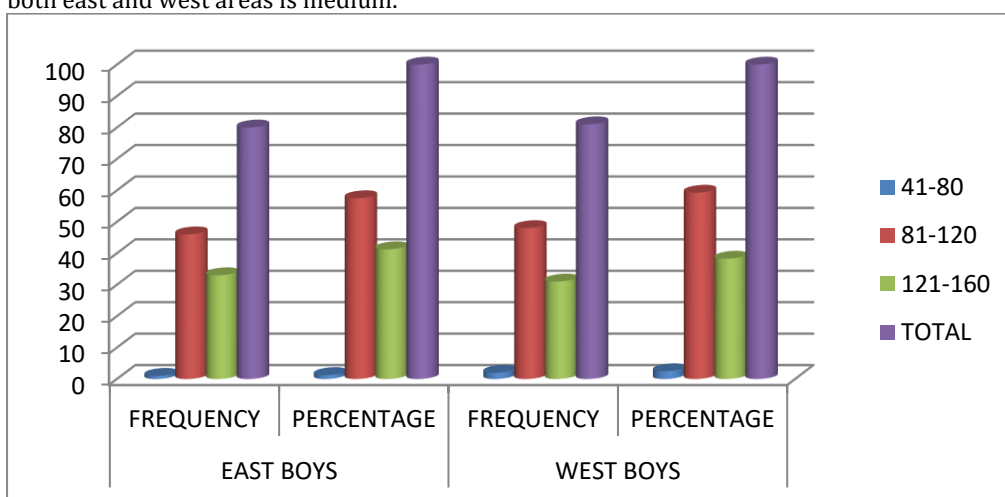
Classification of Environmental Awareness test scores frequency and percentage of boys and girls of West Area of Ahmedabad City.

**TABLE 10**

Classification of Environmental Awareness test scores frequency and percentage of Higher Secondary School Boys of East and West Areas of Ahmedabad City.

	EAST BOYS		WEST BOYS	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
<b>41-80</b>	1	1.25	2	2.47
<b>81-120</b>	46	57.50	48	59.26
<b>121-160</b>	33	41.25	31	38.27
<b>TOTAL</b>	<b>80</b>	<b>100</b>	<b>81</b>	<b>100</b>

In TABLE 10, we can see that in the east area, 1.25 percent boys have a low level of environmental awareness and 57.50 percent boys have medium level of environmental awareness and 41.25 percent boys showing higher level of environmental awareness. Similarly in the west area 2.47 percent boys have a low level of environmental awareness, 59.26 percent boys have medium level of environmental awareness, and 38.27 percent boys show higher level of environmental awareness. So, we can say that the level of environmental awareness of boys in both east and west areas is medium.



**GRAPH 6**

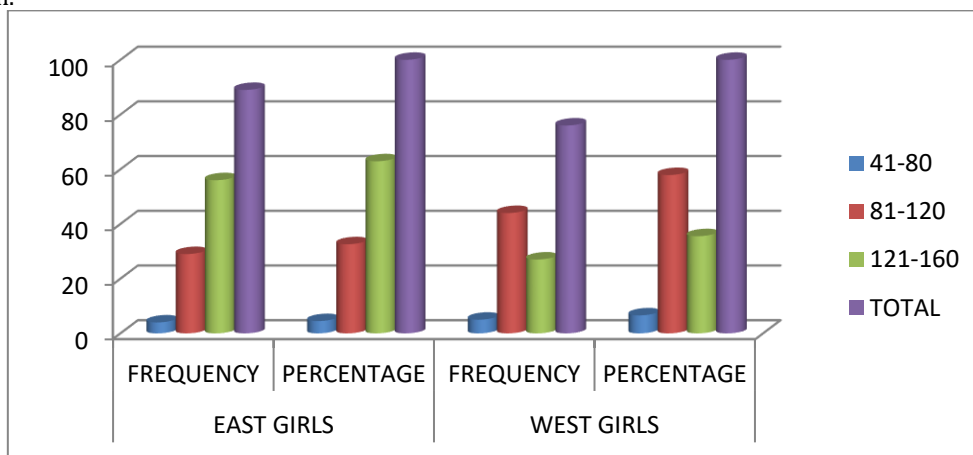
Classification of Environmental Awareness test scores frequency and percentage of Higher Secondary School Boys of East and West Areas of Ahmedabad City.

**TABLE-11**

**Classification of Environmental Awareness test scores frequency and percentage of Higher Secondary School Girls of East and West Areas of Ahmedabad City.**

	EAST GIRLS		WEST GIRLS	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
41-80	4	4.49	5	6.58
81-120	29	32.59	44	57.89
121-160	56	62.92	27	35.53
<b>TOTAL</b>	<b>89</b>	<b>100</b>	<b>76</b>	<b>100</b>

From TABLE 11, we can say that in total girls of the east area, 4.49 percent have a low level of environmental awareness, 32.59 percent have medium level of environmental awareness and 62.92 percent have a higher level of environmental awareness. Similarly, in total girls of west area 6.58 percent have low level, 57.89 percent have medium level and 35.53 percent have higher level of environmental awareness. So, we can say that, the level of environmental awareness in the east area girls is higher and in the west area girls is medium.



**GRAPH-7**

**Classification of Environmental Awareness test scores frequency and percentage of Higher Secondary School Girls of East and West Areas of Ahmedabad City.**

**H0<sub>1</sub>: There is no significant difference between the mean scores of environmental awareness test scores of the students of the Higher Secondary Schools of east and west areas of Ahmedabad city.**

TABLE 12 shows the mean, standard deviation, and t-value calculated for higher secondary school students of the Ahmedabad city.

**Analysis of Mean value, SD, and t value of Environmental Awareness test of Higher Secondary School Students of East and West Area of Ahmedabad City.**

Area	N	df	Mean	SD <sup>2</sup>	Mean Diff.	SED	CR	Significant Level
East	169	324	118.14	198.67	5.73	1.72	3.33	Significant
West	157		112.41	279.16				

**TABLE-12**

$$CR_{cal} 3.33 > t_{tab} = t_{0.01} 2.59$$

$$CR_{cal} 3.33 > t_{tab} = t_{0.05} 1.97$$

$$0.01 \text{ significance level } 2.59$$

$$0.05 \text{ significance level } 1.97$$

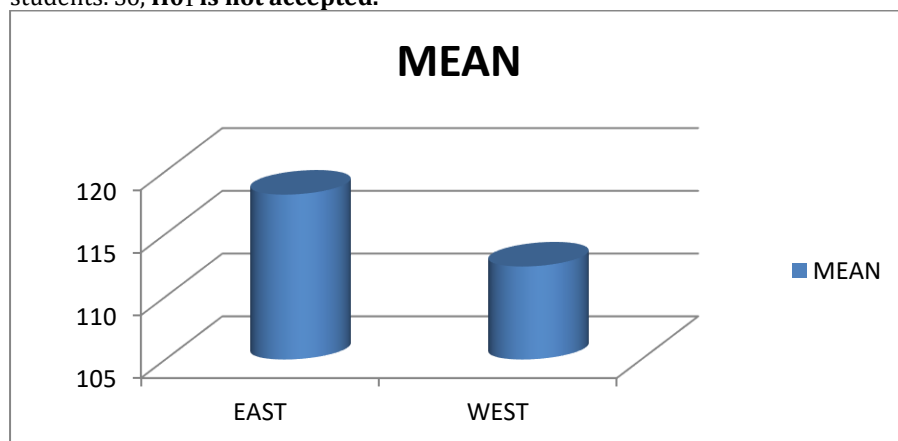
**Interpretation**

Observation of TABLE 12 reveals the mean score of Environmental Awareness test scores of the East and West areas of Ahmedabad city are 118 and 112 respectively. It is evident that  $CR_{cal} 3.33$  is more than the table value  $t_{0.01} = 2.59$  at 0.01 level significance and  $CR_{cal} 3.33$  is also more than the table value  $t_{0.05} = 1.97$  at 0.05 level of significance.

Hence, the hypothesis that there is no significant difference between the mean scores of environmental awareness tests of Higher Secondary School students of Ahmedabad city studying in east and west areas is not accepted at both 0.01 and 0.05 levels of significance.



It further indicates that the environmental awareness of east area students is significantly better than west area students. So,  $H_{01}$  is not accepted.



GRAPH-8

Mean Scores of Environmental Awareness test scores of Higher Secondary Students of East and West Area of Ahmedabad City.

$H_{02}$ : There is no significant difference between the mean scores of environmental awareness of the Boys and Girls of Higher Secondary Schools of Ahmedabad city.

TABLE no. 13 shows the mean score, standard deviation, and t-value calculated for boys and girls of higher secondary schools of Ahmedabad city.

Analysis of Mean value, SD, and t value of Environmental Awareness test of Boys and Girls of Higher Secondary Schools of Ahmedabad City.

Gender	n	df	Mean	SD <sup>2</sup>	Mean Diff.	SED	CR	Significant Level
Boys	161	324	114.09	228.64	2.56	1.73	1.48	Not Significant
Girls	165		116.65	258.96				

TABLE-13

$CR_{cal} 1.48 < t_{tab} = t_{0.01} 2.59$

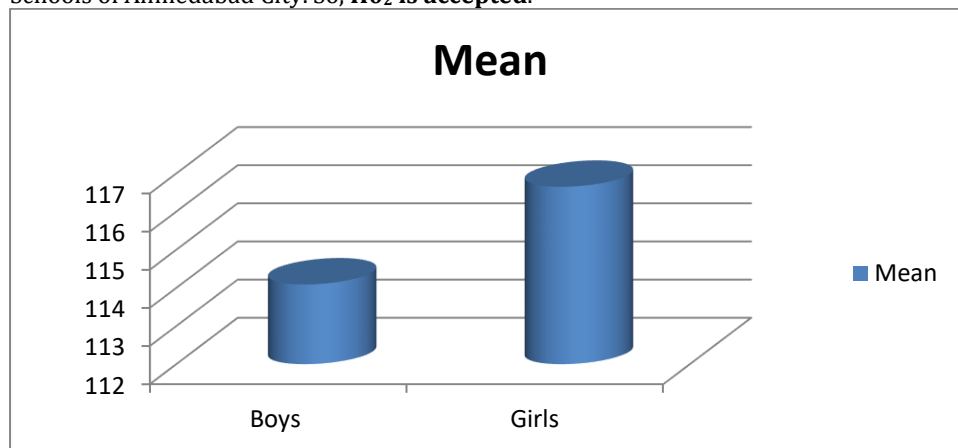
0.01 significance level 2.60

$CR_{cal} 1.48 < t_{tab} = t_{0.05} 1.97$

0.05 significance level 1.97

**Interpretation**

Observation of TABLE-13 reveals the mean score of Boys and Girls are 114 and 116.65 respectively. It is evident that  $CR_{cal}$  value is 1.48 which is less than the table value  $t_{0.01} = 2.59$  at 0.01 level of significance and  $CR_{cal} 1.48$  is also less than the table value  $t_{0.05} = 1.97$  at 0.05 level of significance. Hence, the Hypothesis that there is no significant difference between the mean scores of environmental awareness test scores of Boys and Girls of Higher Secondary Schools of Ahmedabad city is not accepted at both 0.01 and 0.05 level of significance. It further indicates that the environmental awareness test scores of Girls is better than the Boys of Higher Secondary Schools of Ahmedabad City. So,  $H_{02}$  is accepted.



GRAPH-9

Mean Scores of Environmental Awareness test of the Boys and Girls of

**Higher Secondary Schools of Ahmedabad City.**

**H0<sub>3</sub>: There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of the East area of Ahmedabad city.**

TABLE 14 shows the mean scores, standard deviation, and t-value calculated for boys and girls of higher secondary schools in the east area of Ahmedabad city.

**Analysis of Mean score, SD, and t-value of Environmental Awareness test of Boys and Girls of Higher Secondary Schools of East Area of Ahmedabad City.**

**TABLE-14**

East	n	df	Mean	SD <sub>2</sub>	Mean Diff.	SED	CR	Significant Level
Boys	80	167	116.29	150.15	3.52	2.13	1.65	Not Significant
Girls	89		119.81	236.40				

$$\begin{aligned} df &= n-2 \\ &= 169-2 \\ &= 167 \end{aligned}$$

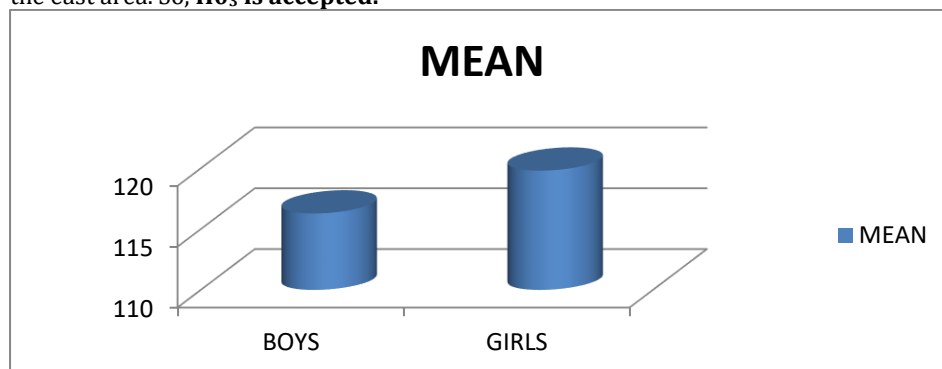
$$\begin{aligned} CR_{cal} &= 1.65 < t_{tab} = t_{0.01} = 2.60 \\ CR_{cal} &= 1.65 < t_{tab} = t_{0.05} = 1.97 \end{aligned}$$

**Interpretation**

Observation of TABLE-14 reveals the mean scores of Boys and Girls are 116 and 119 respectively. It is evident that CR<sub>cal</sub> value is 1.65 which is less than the table value t<sub>0.01</sub> 2.60 at 0.01 level of significance and also less than t<sub>0.05</sub> 1.97 at 0.05 level significance.

Hence the hypothesis, that there is no significant difference between the mean scores of environmental awareness tests of Boys and Girls studying in the Higher Secondary Schools of the east area of Ahmedabad city, is accepted at both 0.01 and 0.05 levels of significance.

It further indicates that the environmental awareness test scores of Girls is significantly better than the boys of the east area. So, **H0<sub>3</sub> is accepted.**



**GRAPH-10**

**Mean Scores of Environmental Awareness test of the Boys and Girls of Higher Secondary Schools of East area of Ahmedabad city.**

**H0<sub>4</sub> There is no significant difference between the mean scores of environmental awareness of the Boys and Girls of Higher Secondary Schools of the West area of Ahmedabad city.**

TABLE-15 shows the mean score, standard deviation, and t-value calculated for boys and girls of higher secondary schools of the west area of Ahmedabad city.

**Analysis of Mean score, SD, and t-value of Environmental Awareness test of Boys and Girls of Higher Secondary Schools of West Area of Ahmedabad City.**

**TABLE-15**

West	n	df	Mean	SD <sub>2</sub>	Mean Diff.	SED	CR	Significant Value
Boys	81	155	111.91	296.65	1.03	2.66	0.39	Not Significant
Girls	76		112.95	259.97				

$$\begin{aligned} df &= n-2 \\ &= 157-2 \\ &= 155 \end{aligned}$$

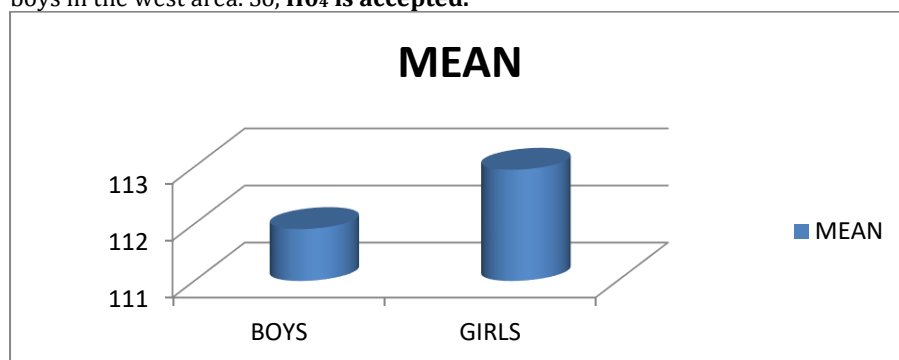
$$\begin{aligned} CR_{cal} &= 0.39 < t_{tab} = t_{0.01} = 2.60 \\ CR_{cal} &= 0.39 < t_{tab} = t_{0.05} = 1.97 \end{aligned}$$

**Interpretation**

Observation of table 15 reveals the mean scores of boys and girls are 111 and 112 respectively. It is evident that CR<sub>cal</sub> = 0.39 which is less than the table value t<sub>0.01</sub> 2.60 at 0.01 level of significance and also less than t<sub>0.05</sub> 1.97 at 0.05 level of significance.

Hence, the hypothesis that there is no significant difference between the mean scores of environmental awareness test of boys and girls studying in the Higher Secondary Schools of the west area in Ahmedabad city is accepted at both the 0.01 and 0.05 levels of significance.

It further indicates that the environmental awareness test of girls in the west area is significantly better than boys in the west area. So, **H<sub>04</sub> is accepted.**



**GRAPH-11**

**Mean Scores of Environmental Awareness test of the Boys and Girls of Higher Secondary Schools of the West area of Ahmedabad city.**

**H<sub>05</sub>: There is no significant difference between the mean scores of environmental awareness tests of the Boys of Higher Secondary Schools of East and West areas of Ahmedabad city.**

TABLE-16 shows the mean score, standard deviation, and t-value calculated for boys of higher secondary schools in the east and west area of Ahmedabad city.

**Analysis of Mean score, SD, and t-value of Environmental Awareness test of Boys of Higher Secondary Schools of East and West Area of Ahmedabad City.**

**TABLE-16**

Boys	n	df	Mean	SD <sub>2</sub>	Mean Diff.	SED	CR	Significant level
East	80	159	116.29	150.15	4.37	2.37	1.86	Not Significant
West	81		111.91	296.65				

$$df = n-2$$

$$= 161-2$$

$$= 159$$

$$CR_{cal} 1.86 < t_{tab} = t_{0.01} = 2.60$$

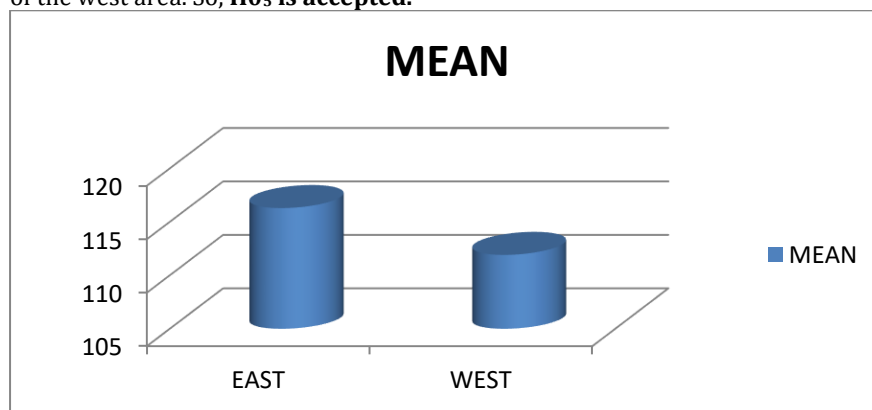
$$CR_{cal} 1.86 < t_{tab} = t_{0.05} = 1.97$$

**Interpretation**

Observation of TABLE-16 reveals that the mean score and SD of east and west boys are 116 and 111 respectively. It is evident that  $CR_{cal} 1.86$  which is less than the table value  $t_{0.01} = 2.60$  at 0.01 level of significance and  $CR_{cal} 1.86$  which is also less than the table value  $t_{0.05} = 1.97$  at 0.05 level of significance.

Hence the hypothesis that there is no significant difference between the mean scores of environmental awareness test of Higher Secondary School boys studying in east and west areas of Ahmedabad city is accepted at both the 0.01 and 0.05 level of significance.

It further indicates that the environmental awareness of boys of the east area is significantly better than the boys of the west area. So, **H<sub>05</sub> is accepted.**



**GRAPH-12**

**Mean Scores of Environmental Awareness test scores of the Boys of Higher Secondary Schools of East and West Area of Ahmedabad city.**

**H0<sub>6</sub>: There is no significant difference between the mean scores of environmental awareness test of the Girls of Higher Secondary Schools of East and West areas of Ahmedabad city.**

TABLE 17 shows the mean scores, standard deviation, and t-value calculated for girls of higher secondary schools of east and west area of Ahmedabad city.

**Analysis of Mean, SD, and t-value of Environmental Awareness of Girls of Higher Secondary Schools of East and West Area of Ahmedabad City.**

**TABLE-17**

Girls	n	df	Mean	SD <sup>2</sup>	Mean Diff.	SED	CR	Significant Level
East	89	163	119.81	236.40	6.86	2.47	2.78	Significant
West	76		112.95	259.97				

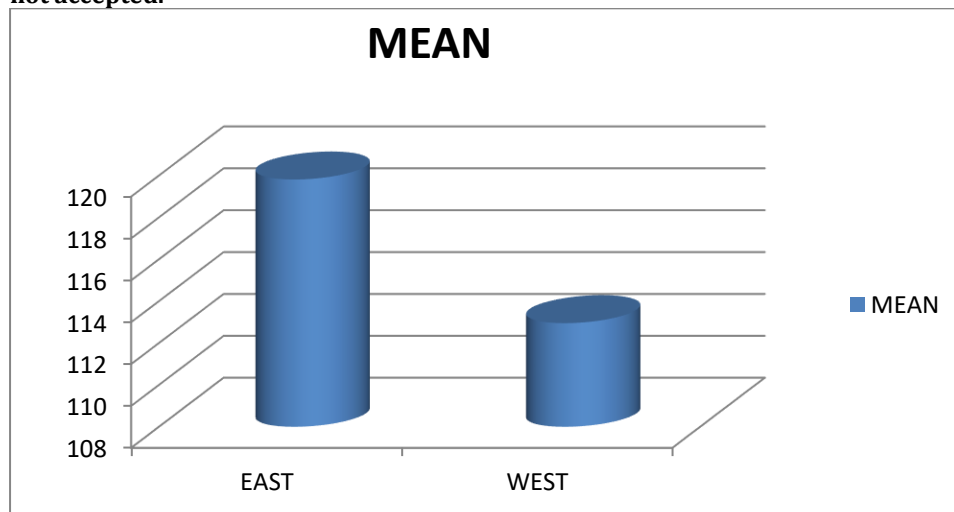
df = n-2  
= 165-2  
= 163

CR<sub>cal</sub> 2.78 > t<sub>tab</sub> = t<sub>0.01</sub> = 2.60  
CR<sub>cal</sub> 2.78 > t<sub>tab</sub> = t<sub>0.05</sub> = 1.97

**Interpretation**

Observation of TABLE 17, reveals the mean score and SD of east and west areas girls are 119 and 112 respectively. It is evident that CR<sub>cal</sub> 2.78 is greater than the table value t<sub>0.01</sub> 2.60 at 0.01 level of significance and CR<sub>cal</sub> 2.78 is also greater than the table value t<sub>0.05</sub> 1.97 at 0.05 level of significance. Hence the hypothesis that there is no significant difference between the mean scores of environmental awareness test of Higher Secondary School girls studying in east and west areas of Ahmedabad city is not accepted at both 0.01 and 0.05 levels of significance.

It further indicates that the environmental awareness of east area girls are better than west area girls. So, **H0<sub>6</sub> is not accepted.**



**GRAPH-13**

**Mean scores of environmental awareness test of Girls of Higher Secondary Schools of East and West areas of Ahmedabad city.**

The researcher has described the analysis of statistical data and interpretation of the results. The researcher has tried to measure the effect of gender and area of Ahmedabad city.

For the purpose of present study all the data which were collected from Higher Secondary School students in Ahmedabad city has been scored and assembled in a systematic manner and has been used to calculate mean, SD<sup>2</sup>, and t-value to compute difference in the score. To get various statistical data for descriptive statistical data analysis, MS Excel workbook system, driven by Microsoft Software was used. In the present study, null hypotheses were constructed, so that researchers can see the effect of the selected independent variables on the dependent variables. The 5-point rating scale was provided to 326 higher secondary school students studying in the east and west areas of Ahmedabad city.

## FINDINGS OF THE RESEARCH

- There is a significant difference between the mean scores of environmental awareness test of Higher Secondary School students in the east and west area of Ahmedabad city. So, it shows the environmental awareness of east area students is significantly better than west area students.
- There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of Ahmedabad city. So it shows the environmental awareness of Girls is better than the Boys of Higher Secondary Schools of Ahmedabad City.
- There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of the East area of Ahmedabad city. So it shows the environmental awareness of Girls is significantly better than the boys of the east area.
- There is no significant difference between the mean scores of environmental awareness test of the Boys and Girls of Higher Secondary Schools of the West area of Ahmedabad city. So it shows the environmental awareness of girls is more than the boys in western areas.
- There is no significant difference between the mean scores of environmental awareness test of the Boys of Higher Secondary Schools of East and West areas of Ahmedabad city. So, it shows the environmental awareness of boys in the east area is more than the boys of the west area.
- There is a significant difference between the mean scores of environmental awareness test of the Girls of Higher Secondary Schools of East and West areas of Ahmedabad city. So, it shows that the environmental awareness of east area girls is more than the west area girls.

## CONCLUSION

In the present research the effort is made to know the environmental awareness of higher secondary school students. In the present study researcher have tried to pinpoint the findings of the research. From analysis and interpretation of data, the findings have been presented as result and then based on findings, suggestions have been made by researcher. It also deals with the recommendation for future research.

The present study shows that the higher secondary students had significant differences in environmental awareness in relation to both gender and area, according to findings it is concluded that the environmental awareness test score of east area students is better than the west area students, and the environmental awareness test score of girls students is better than the boys student. The overall observation suggests a positive trend in environmental awareness among the participants, indicating the potential for addressing and enhancing this aspect. This will need designing of suitable programs and implementing this program through both curricular and co-curricular activities. Such an attempt will prove to be beneficial both for the XI standard students and the next generation as a whole.

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