

**CHAPTER-IV**  
**DATA ANALYSIS**  
**INTERPRETATION, DISCUSSION**  
**AND RESULTS**

## 4.0. Introduction

The previous chapter in this study deals with the conceptual and theoretical aspects of the study, a detailed review of literature and the methodology that has been followed in the present study after considering the objectives and hypothesis of the present research, the data is collected by the researcher. After the scoring and tabulation of data, the analysis and finally the interpretation with the help of descriptive and inferential statistics are done. The present chapter focuses on the analysis and interpretation of data that were collected for the study.

### 4.1. Analysis Of Data

The data has been analyzed using t-test; descriptive statistics, Pearson's product moment correlation.

### 4.2. Statistical Methods Used

- Descriptive statistics
- Independent samples t-test
- Pearson's product Moment

### 4.3. Descriptive Statistics

**Objective 1: To assess the level of Emotional Maturity and Academic Achievement of Standard IX students of Balasore District.**

In order to find the level of Emotional Maturity of Secondary school students, the total scores obtained were classified in to three categories namely: High, Moderate and Low.

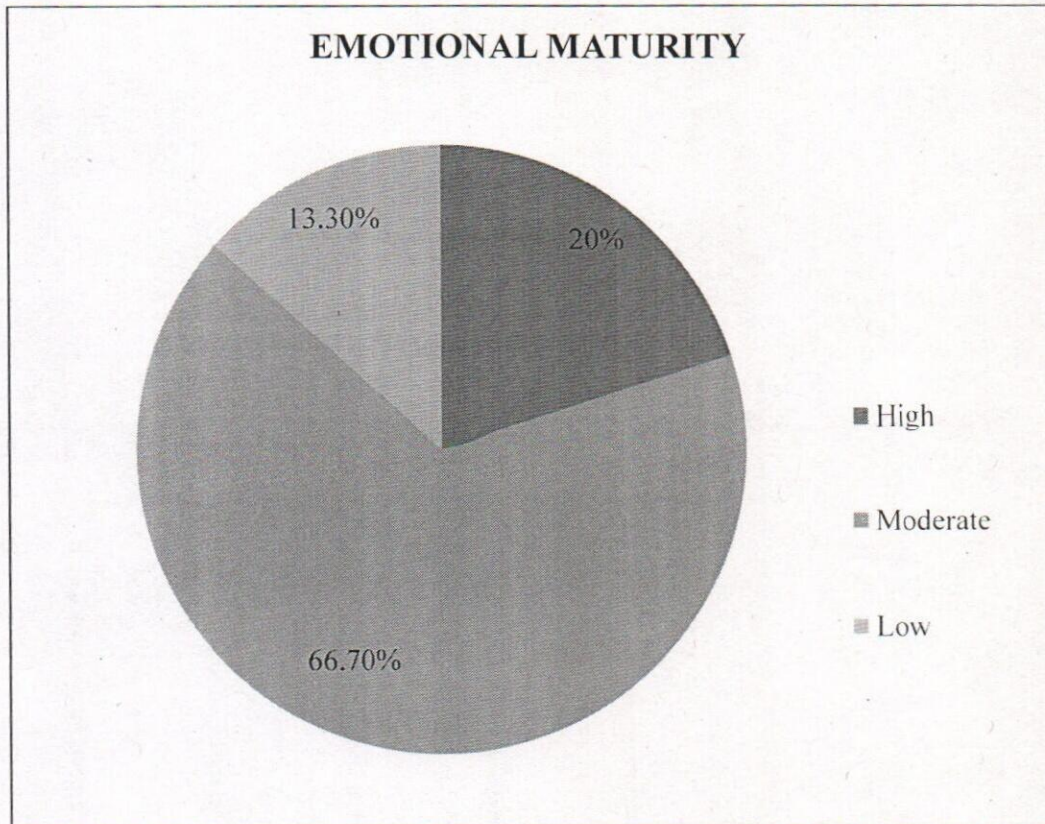
**Table-4.1: Range of scores for each level of Emotional Maturity**

SI No	Level of Emotional Maturity	Range
01	High	98-130
02	Moderate	65-97
03	Low	26-64

**Table-4.2: Percentage of Students having High, Moderate and Low levels of Emotional Maturity.**

Variable	Levels	Frequency	Percentage
Emotional Maturity	High	6	20.0
	Moderate	20	66.7
	Low	4	13.3
Total		30	100.0

**Graph-4.1: Percentage of students having high, moderate and low Levels of Emotional Maturity.**



**Table-4.3: Percentage of students having different levels of Emotional Maturity across type of gender.**

Variables	Types of Gender	Levels	Total Students	Percentage (%)
1	Male	High	3	20
		Moderate	9	60
		Low	3	20
		Total	15	100.0
2	Female	High	3	20
		Moderate	11	73.3
		Low	1	6.7
		Total	15	100.0

In order to find the level of Academic Achievement of secondary school students, the total scores obtained were classified in to three categories namely: High, Average and low.

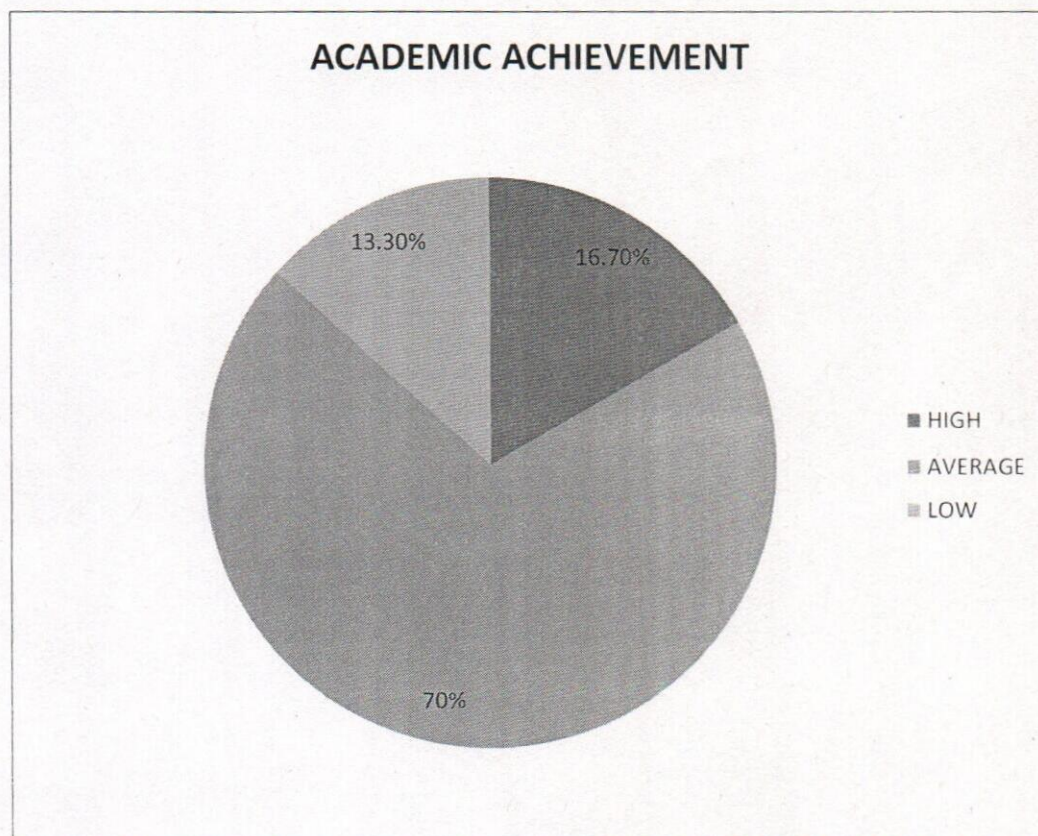
**Table-4.4: Percentage of students having different scores for level of Academic Achievement**

SI No	Level of Academic Achievement	Range	Percentage
1	High	402 and above	Above 67%
2	Average	186-401	31-67%
3	Low	185 and below	Below 31%

**Table-4.5: Percentage of students having high, moderate and low Level of Academic Achievement**

Variable	Levels	Frequency	Percentage
Academic Achievement	High	5	16.7
	Average	21	70
	Low	4	13.3
Total		30	100.0

**Graph-4.2: Percentage of students having high, moderate and low Level of Academic Achievement**



**Table-4.6: Percentage of students having different levels of Academic Achievement across Type of gender**

Variables	Types of Gender	Levels	Total Students	Percentage (%)
1	Male	High	3	20
		Average	10	66.7
		Low	2	13.3
		Total	15	100.0
2	Female	High	2	13.33
		Average	11	73.33
		Low	2	13.33
		Total	15	100.0

#### 4.4. Descriptive Statistics And T-Test:

**Objective-2:** To find whether there is a significant difference in emotional maturity and academic achievement of among standard IX Male and Female students of Balasore District.

**Hyp-1.1:** There is no significant difference in emotional maturity among standard IX male and female students of Balasore District.

**Table-4.7: Comparative mean scores of Emotional Maturity of standard IX male and female students of Balasore District.**

Types of Gender	N	Mean	SD	t	df	Sig/Not Sig.
Male	15	81.86	22.78	0.922	28	Not Sig.
Female	15	81.06	21.77			

From the Table-4.7 it is observed that the obtained 't' value is 0.922 is lesser than that of table value 't' at 0.05 (2.021) level of significance for df 28.

Thus, null hypothesis 1.1 is accepted. This means that there is no significant difference in Emotional Maturity between male and female students is accepted.

**Hyp-1.2: There is no significant difference in academic achievement among standard IX male and female students of Balasore District.**

**Table-4.8: Comparative mean scores of Academic Achievement of standard IX male and female students of Balasore District.**

Types of Gender	N	Mean	SD	t	df	Sig/Not Sig.
Male	15	333.13	103.83	0.893	28	Not Sig.
Female	15	338.06	95.77			

From the Table-4.8 it is observed that the obtained 't' value (0.893) is lesser than the of table value 't' at 0.05 (2.021) levels of significance for df 28.

Hence, null hypothesis 1.2 is accepted. This implies that, there is no significance difference in Academic Achievement among standard IX male and female students of Balasore District.

#### **4.5. CO-RELATIONS**

**Objective-3: To find the relationship between emotional maturity and academic achievement of standard IX students of Balasore District**

**Hyp-2: There is no significant relationship between emotional maturity and academic achievement of standard IX students.**

**Table-4.9: Relationship between Emotional Maturity and Academic Achievement of standard IX students of Balasore District.**

Variable	N	r	Sig. / Not Sig.
Emotional Maturity and Academic Achievement	30	0.73	0.000 Significance

From the Table-4.9 it is evident that 'r' value of emotional maturity and academic achievement is 0.73. In the other words correlation between emotional maturity and academic achievement of standard IX students were found to be positive.

It is found that the 'r' value is 0.73 is significant. Hence hypothesis 2 is rejected and accepted an alternative hypothesis. This shows that there is a significant relationship between Emotional maturity and academic achievement of standard IX students of Balasore District.

**Objective-4: To find whether there is a significant relationship between emotional maturity and academic achievement among following variables**

**Hyp-3: There is no significant relationship between emotional maturity and academic achievement among standard IX students of Balasore District in following categories**

**Table-4.10: Relationship between emotional maturity and academic achievement among standard IX male and female students of Balasore District.**

Variable	N	r	Sig. / Not Sig.
Male students	15	0.83	0.00 Significance
Female students	15	0.63	0.01 Significance

From the Table-4.10 it is observed that 'r' value of emotional maturity and academic achievement of male students is 0.83 and female students is 0.63. Hence, we understood that emotional maturity and academic achievement of standard IX male and female students are positively related.

Thus, the Null hypothesis 3 is rejected i.e. There is a significant relationship between emotional maturity and academic achievement among boys and girl students of Balasore District.