

Chapter IV

Analysis and Interpretation of Data

4.0 Introduction

Analysis and Interpretation is considered as the heart of the research work. Analysis of data means studying the tabulated data in order to determine inherent facts. It was associated with the drawing of inference from the collected facts after an analytical study. This chapter presents the analysis of data according to the objectives and hypotheses laid down by the research scholar to explore new facts or to interpret already existed fact.

For the proper analysis and interpretation of the data, at first the questionnaires were scored as per the scoring guidelines given in the manuals of all the tools. Item wise and dimension wise entry was done in excel sheets and the calculation was done in excel and SPSS version 20 for the ease of statistical calculation. That data was analysed using both descriptive as well as inferential statistics. In the present study data is been analysed based on the objectives of the study. Descriptive statistics is used to describe the trends in the data and to show the general spread of scores whereas inferential statistics are used for comparing two or more groups. After proper tabulation and organisation of data, the normality of the sampled data has to be checked to decide appropriate test for the null hypotheses to be used in the study. For this reason, normality test, both KS test and Shapiro-Wilk test in SPSS was carried out for Personality Characteristics, Educational Aspiration and Self-Concept, the result is been given in table 4.1 below:

4.1 Assumption about the Nature of Quantitative Data

Table 4.1

K-S Test and Shapiro-Wilk Test of Normality of Personality Characteristics, Educational Aspiration and Self-Concept

	Kolmogorov-Smirnov Test			Shapiro-Wilk Test		
	Statistics	df	Sig.	Statistics	df	Sig.
Personality Characteristics	.035	600	.082	.998	600	.605
Educational Aspiration	.046	600	.079	.995	600	.090
Self- Concept	.038	600	.034	.995	600	.050

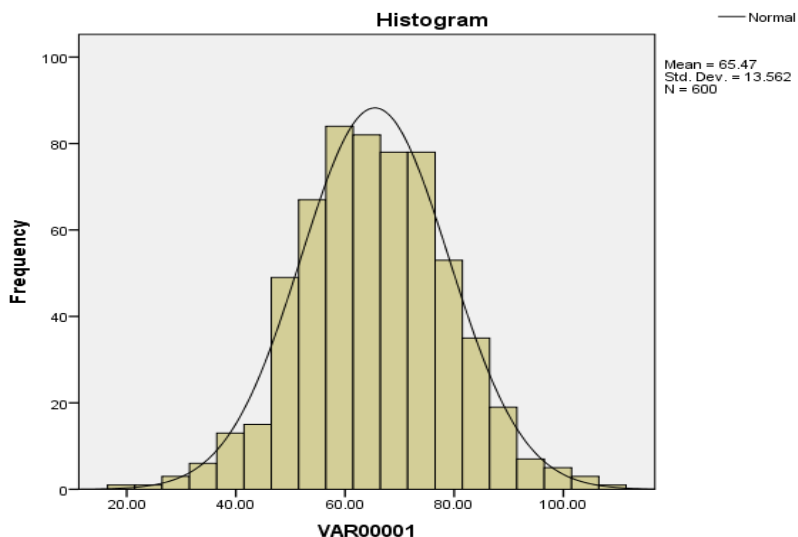
Note. $p > 0.05$ for both KS test and Shapiro-Wilk Test

Table 4.1 Shows the results of the KS test and Shapiro-Wilk Test for normality of sampled data of Personality Characteristics, Educational Aspiration and Self-Concept. For Personality Characteristics the p-value of KS test is .090 and Shapiro-Wilk Test is .605 which is > 0.05 value. It shows the normality of the sampled data. For Educational Aspiration the p-value of KS test is .079 and Shapiro-Wilk Test is .605 which is > 0.05 value. It also shows the normality of the sampled data. For Self-Concept the p-value of KS test is .034 and Shapiro-Wilk Test is .050 which is > 0.05 value. It again shows the normality of the sampled data. As per the normality of the data it was decided to use parametric tests for testing the null hypotheses. For the study Mean, SD, t-test, Pearson's product moment correlation analysis was done keeping in view the objectives of the study.

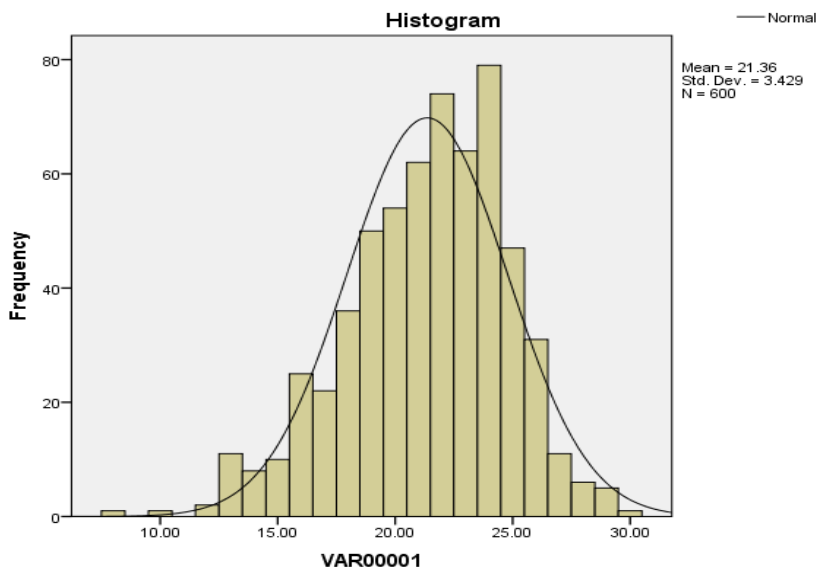
The graphical representation of Normality of Personality Characteristics, Educational Aspiration and Self-Concept is presented in Figure 4.1.

Figures 4.1 (I, II, III)

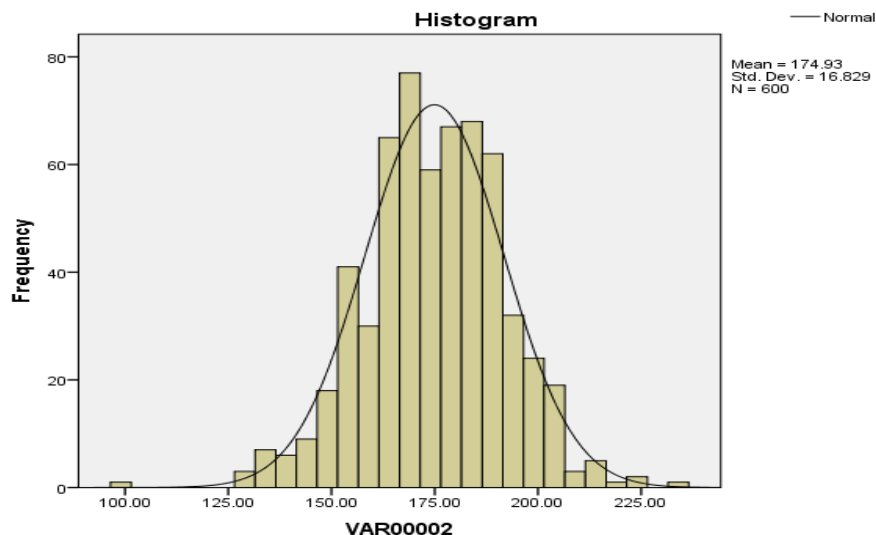
Graphical representation of Normality of Personality Characteristics, Educational Aspiration and Self-Concept



(I) Personality Characteristics



(II) Educational Aspiration



(III) Self-Concept

Figure 4.1 shows the visual summary of Normality of sampled data with histogram for Personality Characteristics, Educational Aspiration and Self-Concept.

4.2 Data Analysis

1. The objective number 1 to 3 aimed to find out the level of Personality Characteristics, Educational Aspiration and self-concept along with their dimensions among male and female secondary school students of Sikkim, based on the questionnaires percentage wise analysis is done.

2. The objective number 4, 5 and 6 aimed to find out the difference between male and female secondary school students of Sikkim in relation to Personality Characteristics, Educational Aspiration and self-concept along with various dimensions of all three variables. Based on the normality test, the technique of t-test was used in all these cases.

4. The objective number from 7 to 9 aimed to find out the relationship between Personality Characteristics, Educational Aspiration and self-concept among secondary school students of Sikkim. Based on the normality test, the technique of

product moment correlation was used to find out the relationship between different variables.

4.3 Objective of the Present Study

1. To find out the level of Personality Characteristics among male and female secondary school students along with its six dimensions based on personality inventory-

- i. Activity - Passivity Trait
- ii. Enthusiastic - Non-Enthusiastic Trait
- iii. Assertive – Submissive Trait
- iv. Suspicious – Trusting Trait
- v. Depressive - Non-Depressive Trait
- vi. Emotional Instability - Emotional Stability Trait

2. To find out the level of Educational Aspiration among male and female secondary school students based on Level of Educational Aspiration Test-

3. To find out the level of Self Concept among male and female secondary school students along with its six dimensions based on Self-concept Questionnaire –

- A. Physical
- B. Social
- C. Temperamental
- D. Educational
- E. Moral
- F. Intellectual.

4. To study and compare the personality characteristics among male and female secondary school students along with its six dimensions based on personality inventory -

- i. Activity - Passivity Trait
- ii. Enthusiastic and Non-Enthusiastic Trait
- iii. Assertive - Submissive Trait
- iv. Suspicious - Trusting Trait
- v. Depressive -Non-Depressive Trait
- vi. Emotional Instability - Emotional Stability Trait

5. To study and compare the educational aspirations among male and female secondary school students along with its four dimensions based on Level of Educational Aspiration Test-

- a. Family Support
- b. Pupils' Views
- c. Pupils' Efforts
- d. The Reality of Aspired Goals.

6. To study and compare the self-concept among male and female secondary school students along with its six dimensions based on Self-concept Questionnaire -

- A. Physical
- B. Social
- C. Temperamental
- D. Educational
- E. Moral
- F. Intellectual.

7. To study the relationship between Personality characteristics and Educational Aspirations among secondary school students.

8. To study the relationship between Educational Aspirations and Self-concept among secondary school students.

9. To study the relationship between Self-concept and personality characteristics among secondary school students.

4.4 Hypothesis

H₀₁. There is no significant difference between male and female secondary school students in relation to their personality characteristics.

H₀₂. There is no significant difference between male and female secondary school students in relation to the dimension of *Activity - Passivity Trait* of personality inventory.

H₀₃. There is no significant difference between male and female secondary school students in relation to the dimension of *Enthusiastic and Non-Enthusiastic Trait* of personality inventory.

H₀₄. There is no significant difference between male and female secondary school students in relation to the dimension of *Assertive – Submissive trait* of personality inventory.

H₀₅. There is no significant difference between male and female secondary school students in relation to the dimension of *Suspicious- Trusting trait* of personality inventory.

H₀₆. There is no significant difference between male and female secondary school students in relation to the dimension of *Depressive-Non-Depressive trait* of personality inventory.

H₀₇. There is no significant difference between male and female secondary school students in relation to the dimension of *Emotional Instability and Emotional Stability trait* of personality inventory.

H₀₈. There is no significant difference between male and female secondary school students in relation to their educational aspirations.

H_{O9}.There is no significant difference between male and female secondary school students in relation to the dimension of *Family Support* based on level of educational aspirations test.

H_{O10}.There is no significant difference between male and female secondary school students in relation to the dimension of *Pupils' Views* based on level of educational aspirations test.

H_{O11}.There is no significant difference between male and female secondary school students in relation to the dimension of *Pupils' Efforts* based on level of educational aspirations test.

H_{O12}.There is no significant difference between male and female secondary school students in relation to the dimension of *The Reality of Aspired Goals* based on level of educational aspirations test.

H_{O13}.There is no significant difference between male and female secondary school students in relation to their Self-concept.

H_{O14}.There is no significant difference between male and female secondary school students in relation to the dimension of *physical* based on self-concept questionnaire.

H_{O15}.There is no significant difference between male and female secondary school students in relation to the dimension of *social* based on self-concept questionnaire.

H_{O16}.There is no significant difference between male and female secondary school students in relation to the dimension of *Temperamental* based on self-concept questionnaire.

H_{O17}.There is no significant difference between male and female secondary school students in relation to the dimension of *Educational* based on self-concept questionnaire.

H₀₁₈. There is no significant difference between male and female secondary school students in relation to the dimension of *Moral* based on self-concept questionnaire.

H₀₁₉. There is no significant difference between male and female secondary school students in relation to the dimension of *Intellectual* based on self-concept questionnaire.

H₀₂₀. There is no significant relationship between personality characteristics and educational aspirations among secondary school students of Sikkim.

H₀₂₁. There is no significant relationship between educational aspirations and self-concept among secondary school students of Sikkim.

H₀₂₂. There is no significant relationship between self-concept and personality characteristics among secondary school students of Sikkim.

4.5 Objective Wise Interpretation of Data

Descriptive Analysis

4.5.1 Levels of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1

Interpretation of values of Personality Characteristics among male and female secondary school students based on personality inventory

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	19	6.3%	14	4.7%
± 1.26 to +2.00	High	34	11.3%	44	14.7%
± 0.50 to +1.25	Above Average	124	41.3%	126	42%
± 0.50 to +0.50	Average/Moderate	123	41%	116	38.7%

It is evident from the above table 4.5.1 that from the total sample of the secondary school students male have (41%) and females have (39.7%) average level and male (41.3%) and female (42%) have above average level of Personality Characteristics. While very few male (11.3%) and Female (14.7%) have high level and very negligible male (6.3%) and female (4.7%) have extremely high level of Personality Characteristics. Therefore, it can be said that the majority of the Male and Female Secondary School students have average and above average level of Overall Personality Characteristics.

Fig 4.5.1

Bar Diagram representing the level of Personality Characteristics

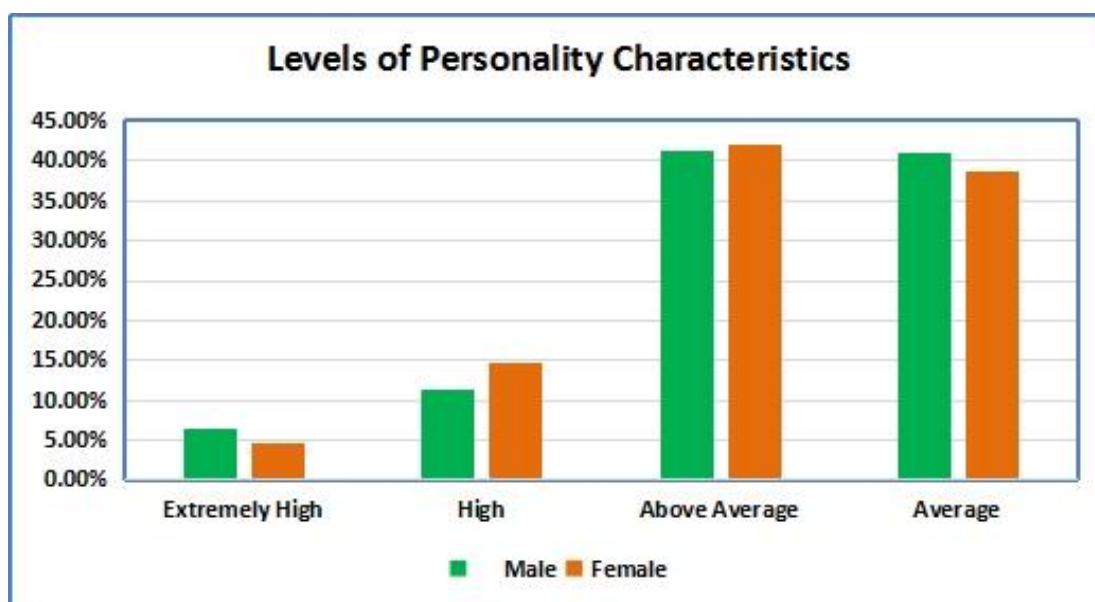


Fig 4.5.1 Bar Diagram representing the level of Personality Characteristics

4.5.1 (1 to 6) represents the Levels of six traits of Personality Characteristics

4.5.1 (1) Levels of Activity and Passivity trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (1)

Interpretation of values of Activity and Passivity trait of Personality Characteristics among male and female secondary school students based on personality inventory

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	15	5%	15	5%
±1.26 to +2.00	High	48	16%	41	13.7%
±0.50 to +1.25	Above Average	100	33.3%	126	42%
± 0.50 to +0.50	Average/Moderate	137	45.7%	119	39.7%

It is evident from the above table 4.5.1 (1) In Activity and Passivity trait male (45.7%) and female (39.7%) have average and male (33.3%) and female (42%) have above average level. While very few male (16%) and Female (13.7%) have high level and male (5%) and female (5%) have extremely high level of Activity and passivity trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of activity and passivity trait of Personality.

Fig 4.5.1 (1)

Bar Diagram representing the level of Activity Passivity Trait of Personality

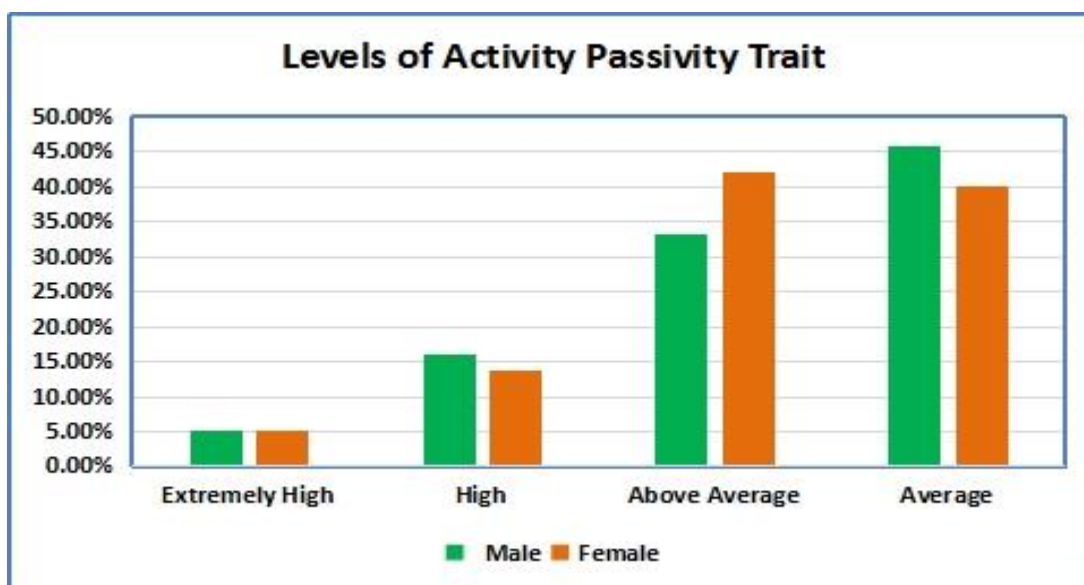


Fig 4.5.1 (1) *Bar Diagram representing the level of Activity Passivity Trait of Personality*

4.5.1 (2) Levels of Enthusiastic and Non- Enthusiastic trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (2)

Interpretation of values of Enthusiastic and Non- Enthusiastic trait of Personality Characteristics among male and female secondary school students based on personality inventory

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	14	4.7%	14	4.7%
± 1.26 to +2.00	High	36	12%	52	17.3%
± 0.50 to +1.25	Above Average	161	53.6%	129	43%
± 0.50 to +0.50	Average/Moderate	89	29.7%	105	35%

It is evident from the above table 4.5.1 (2) In Enthusiastic and Non- Enthusiastic trait male (29.7%) and female (35%) have average and male (53.6%) and female (43%) have above average level. While very few male (12%) and Female (17.3%) have high level and male (4.7%) and female (4.7%) have extremely high level of Enthusiastic and Non- Enthusiastic trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of Enthusiastic and Non- Enthusiastic trait of Personality.

Fig 4.5.1 (2)

Bar Diagram representing the level of Enthusiastic and Non-Enthusiastic Trait of Personality

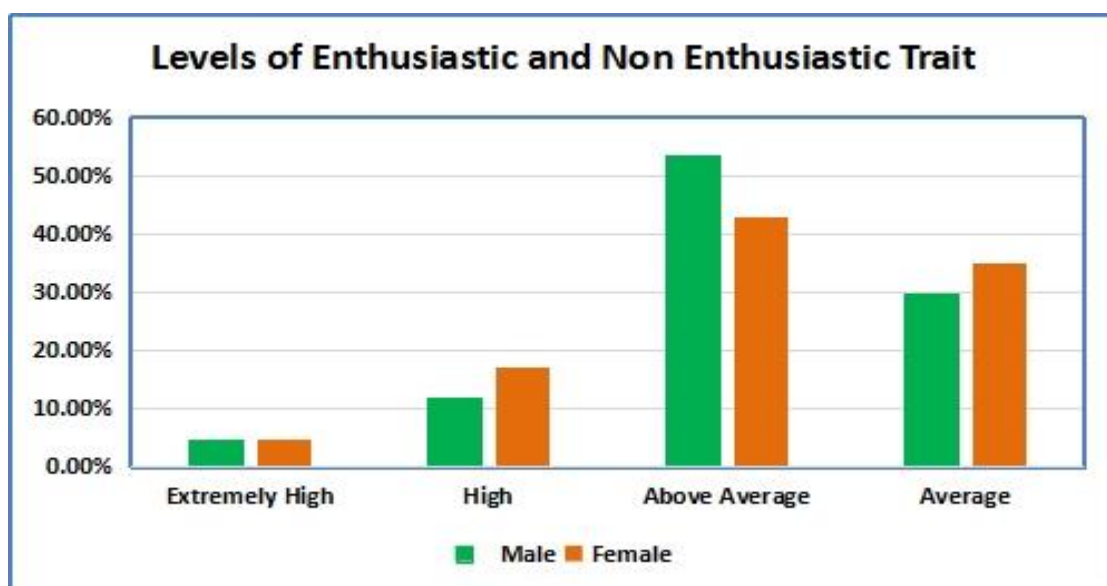


Fig 4.5.1 (2) Bar Diagram representing the level of Enthusiastic and Non-Enthusiastic Trait of Personality

4.5.1 (3) Levels of Assertive - Submissive trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (3)

Interpretation of values of Assertive - Submissive trait of Personality Characteristics among male and female secondary school students based on personality inventory.

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	16	5.3%	09	3%
± 1.26 to +2.00	High	53	17.7%	73	24.3%
± 0.50 to +1.25	Above Average	112	37.3%	100	33.3%
± 0.50 to +0.50	Average/Moderate	119	39.7%	118	39.3%

It is evident from the above table 4.5.1 (3) In Assertive and Submissive trait male (39.7%) and female (39.3%) have average and male (37.3%) and female (33.3%) have above average level. While few male (17.7%) and Female (24.30%) have high level and very negligible male (5.3%) and female (3%) have extremely high level of Assertive and Submissive trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of Assertive and Submissive trait of Personality.

Fig 4.5.1 (3)

Bar Diagram representing the level of Assertive - Submissive Trait of Personality

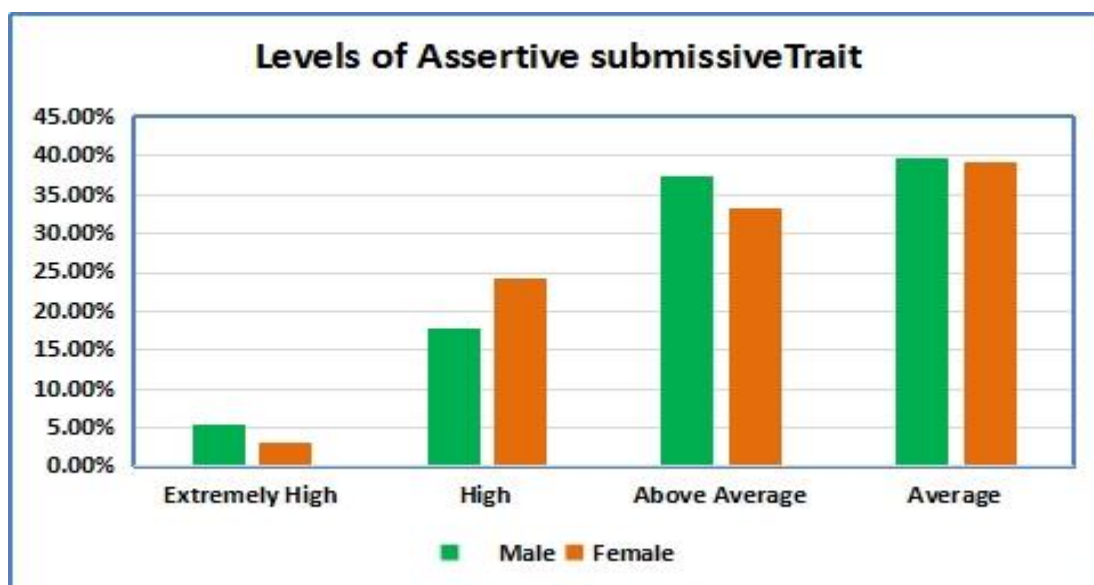


Fig 4.5.1 (3) Bar Diagram representing the level of Assertive - Submissive Trait of Personality

4.5.1 (4) Levels of Suspicious – Trusting trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (4)

Interpretation of values of Suspicious – Trusting trait of Personality Characteristics among male and female secondary school students based on personality inventory.

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	11	3.7%	21	7%
±1.26 to +2.00	High	54	18%	45	15%
±0.50 to +1.25	Above Average	125	41.7%	121	40.3%
±0.50 to +0.50	Average/Moderate	110	36.7%	113	37.7%

It is evident from the above table 4.5.1 (4) In Suspicious and Trusting trait male (36.7%) and female (37.7%) have average and male (41.7%) and female (40.3%) have above average level. While few male (18%) and Female (15%) have high level and very negligible male (3.7%) and female (7%) have extremely high level of Suspicious and Trusting trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of Suspicious and Trusting trait of Personality.

Fig 4.5.1 (4)

Bar Diagram representing the level of Suspicious - Trusting Trait of Personality

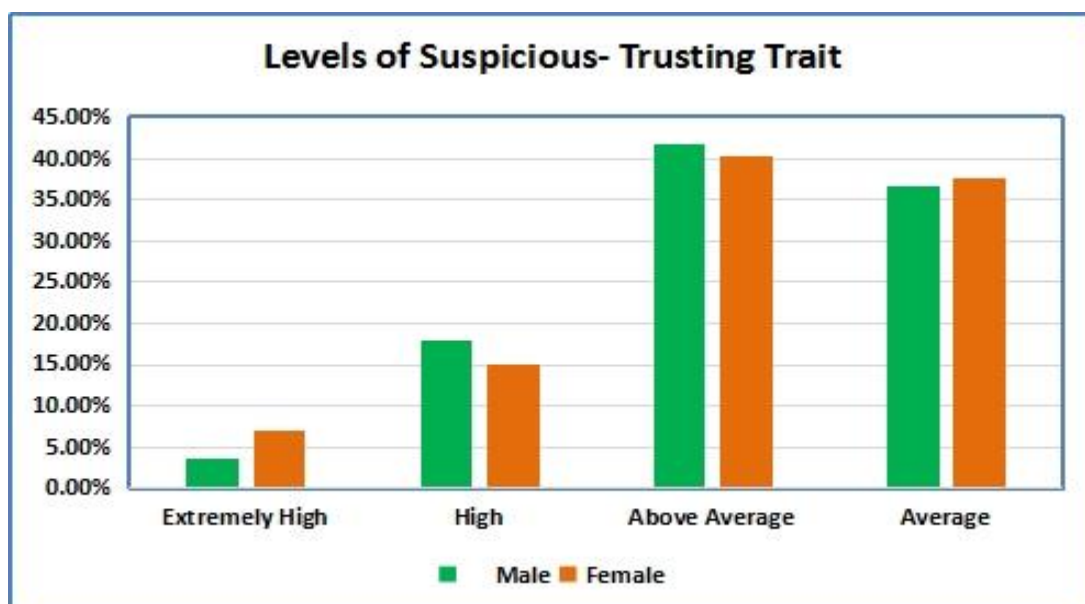


Fig 4.5.1 (4) *Bar Diagram representing the level of Suspicious - Trusting Trait of Personality*

4.5.1 (5) Levels of Depressive- Non Depressive trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (5)

Interpretation of values of Depressive- Non Depressive trait of Personality Characteristics among male and female secondary school students based on personality inventory.

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	10	3.33%	16	5.3%
±1.26 to +2.00	High	45	15%	53	17.7%
±0.50 to +1.25	Above Average	121	40.3%	129	43%
± 0.50 to +0.50	Average/Moderate	124	41.3%	102	34%

It is evident from the above table 4.5.1 (5) In Depressive and Non- Depressive trait male (41.3%) and female (34%) have average and male (40.3%) and female (43%) have above average level. While few male (15%) and Female (17.7%) have high level and very negligible male (3.3%) and female (5.3%) have extremely high level of Depressive and Non- Depressive trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of Depressive and Non- Depressive trait of Personality.

Fig 4.5.1 (5)

Bar Diagram representing the level of Depressive- Non Depressive Trait of Personality

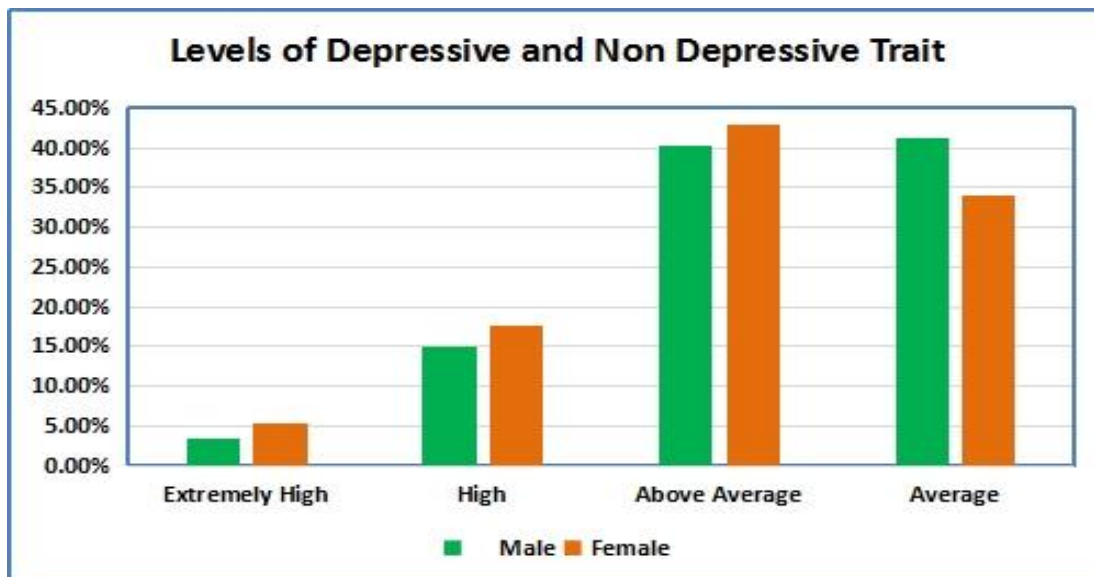


Fig 4.5.1 (5) Bar Diagram representing the level of Depressive- Non Depressive Trait of Personality

4.5.1 (6) Levels of Emotional Instability and Emotional Stability trait of Personality Characteristics among male and female secondary school students based on personality inventory.

Table 4.5.1 (6)

Interpretation of values of Emotional Instability and Emotional Stability trait of Personality Characteristics among male and female secondary school students based on personality inventory.

z- Score Range	Level of Trait	Male	Percentage	Female	Percentage
± 2.01 & above	Extremely High	13	4.3%	10	3.3%
± 1.26 to +2.00	High	63	21%	65	21.7%
± 0.50 to +1.25	Above Average	112	37.3%	113	37.7%
± 0.50 to +0.50	Average/Moderate	112	37.3%	112	37.3%

It is evident from the above table 4.5.1 (6) In Emotional Instability and Emotional Stability trait male (37.3%) and female (37.3%) have average and male (37.3%) and female (37.7%) have above average level. While male (21%) and Female (21.7%) have high level and very negligible male (4.3%) and female (3.3%) have extremely high level of Emotional Instability and Emotional Stability trait. Therefore, it can be said that the majority of the Secondary School students have average and above average level of Emotional Instability and Emotional Stability trait of Personality.

Fig 4.5.1 (6)

Bar Diagram representing the level of Emotional Instability- Emotional Stability Trait of Personality

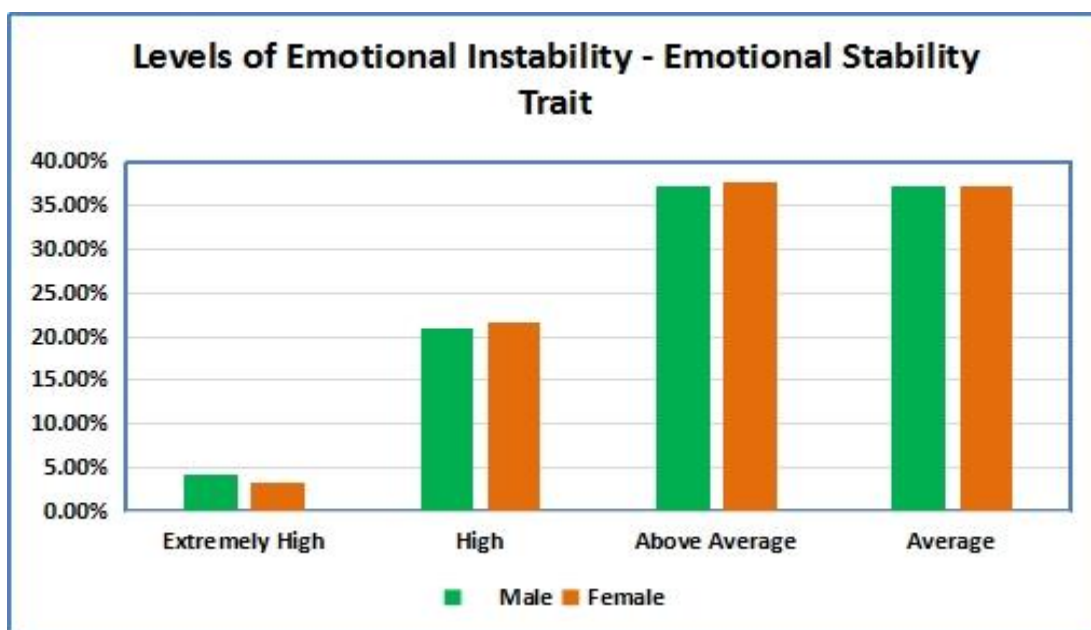


Fig 4.5.1 (6) Bar Diagram representing the level of Emotional Instability- Emotional Stability Trait of Personality

4.5.2. Levels of Educational Aspiration among male and female secondary school students based on Educational Aspiration Scale.

Table 4.5.2

Interpretation of values of Educational Aspiration among male and female secondary school students based on Educational Aspiration Scale

Score Range	Level of Educational Aspiration	Male	Percentage	Female	Percentage
Above 22	High	154	51.3%	164	54.7%
15 to 22	Average	132	44%	127	42.3%
Below 15	Low	14	4.7%	9	3%

It is evident from the above Table 4.5.2 that from the total sample of the secondary school student male (51.3%) and female (54.7%) have High level of Educational Aspiration. These students are highly realistic and have well defined academic goals. While male (44%) and Female (42.3%) have Average level which means that they are realistic and normal and have well adjustment and also they are optimistic. and male (4.7%) and female (3%) have Low level of Educational Aspiration which means these students are in realistic and are carefree towards their academic achievement. Therefore, it can be said that the majority of the Secondary School students have high and Average level of Educational Aspiration.

Fig 4.5.2

Bar Diagram representing the level of Educational Aspiration among male and female secondary school students

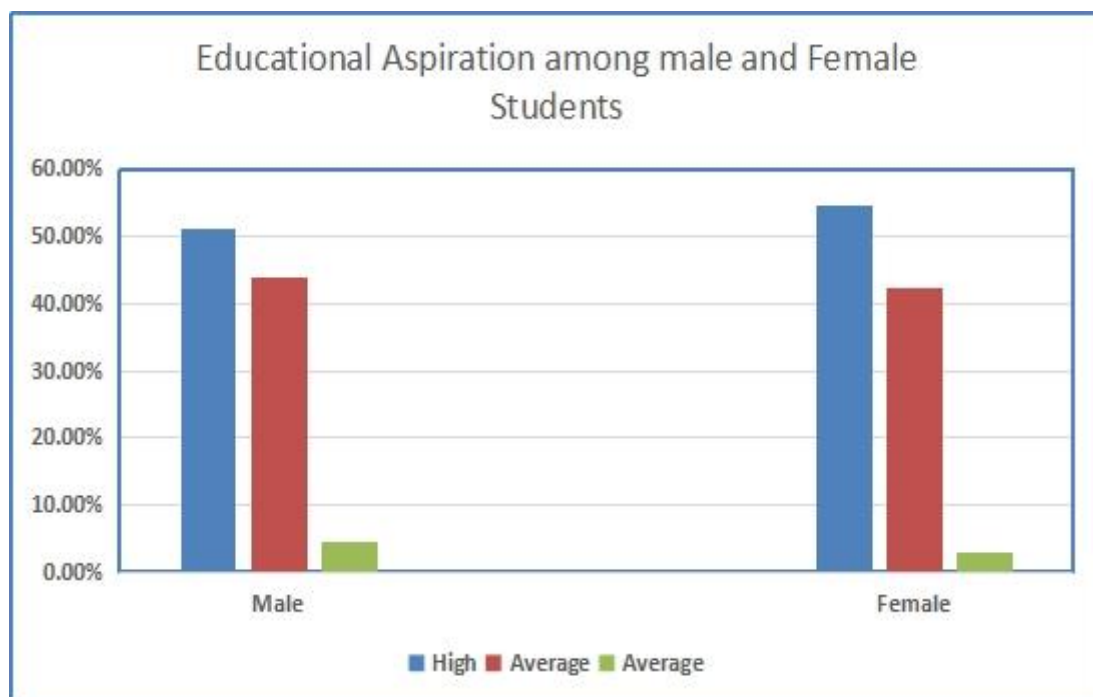


Fig 4.5.2 Bar Diagram representing the level of Educational Aspiration among male and female secondary school students

4.5.3. Levels of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3

Interpretation of values of Self-Concept among male and female secondary school students based on Self Concept Questionnaire

Score Range	Interpretation	Male	Percentage	Female	Percentage
193 to 240	High	36	12%	46	15.3%
145 to 192	Above Average	252	84%	243	81%
97 to 144	Average	12	4%	11	3.7%
49 to 96	Below Average	0	0%	0	0%
1 to 48	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 that from the total sample of the secondary school student male (12%) and female (15.3%) have high level and male (84%) and female (81%) have above average level of Self Concept. While male (4%) and Female (3.7%) have average level and 0% in both male and female in below average level and also in low level Self Concept. Therefore, it can be said that the majority of the Secondary School students have above average level of overall Self Concept.

Fig 4.5.3

Bar Diagram representing the level of Self- Concept among male and female secondary school students

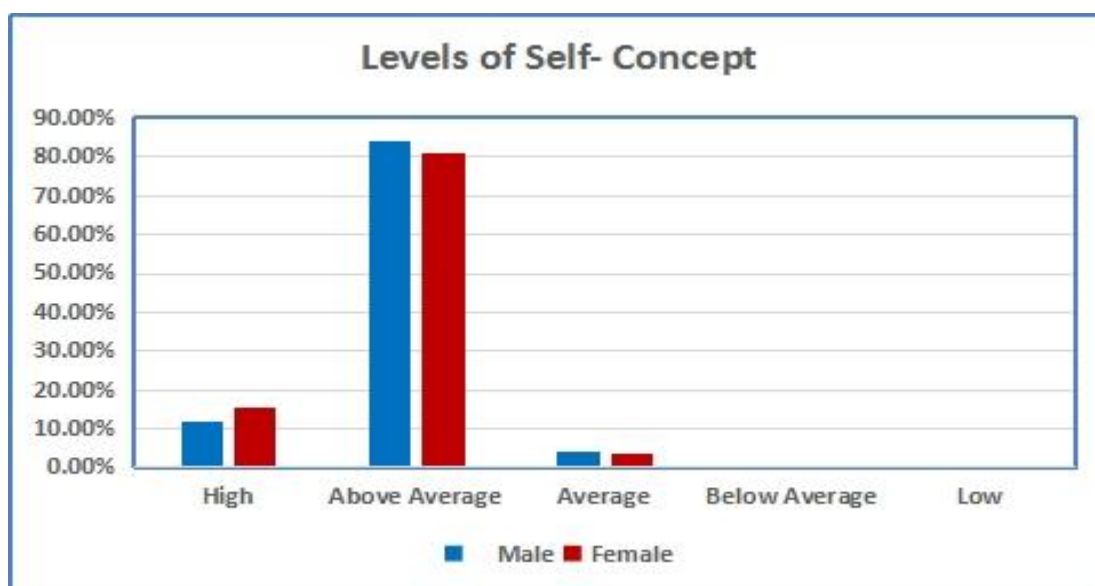


Fig 4.5.3 Bar Diagram representing the level of Self- Concept among male and female secondary school students

4.5.3 (1 to 6) represents the Levels of six dimensions of Self Concept

4.5.3 (1) Levels of Physical Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (1)

Interpretation of values of Physical Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	49	16.4%	47	15.7%
25 to 32	Above Average	207	69%	97	65.7%
17 to 24	Average	40	13.3%	56	18.6%
9 to 16	Below Average	4	1.3%	0	0%
Up to 8	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 (1) In Physical dimension of Self-Concept male students have (16.4%) and female (15.7%) high level and male (69%) and female (65.7%) have above average level. While male (13.3%) and Female (18.6%) have average and very negligible male (1.3%) and female (0%) have below average level and there is (0%) low level student of Physical dimension. Therefore, it can be said that the majority of the Secondary School students have above average level of Physical Dimension of Self Concept.

Fig 4.5.3 (1)

Bar Diagram representing the level of Physical dimension of Self- Concept among male and female secondary school students

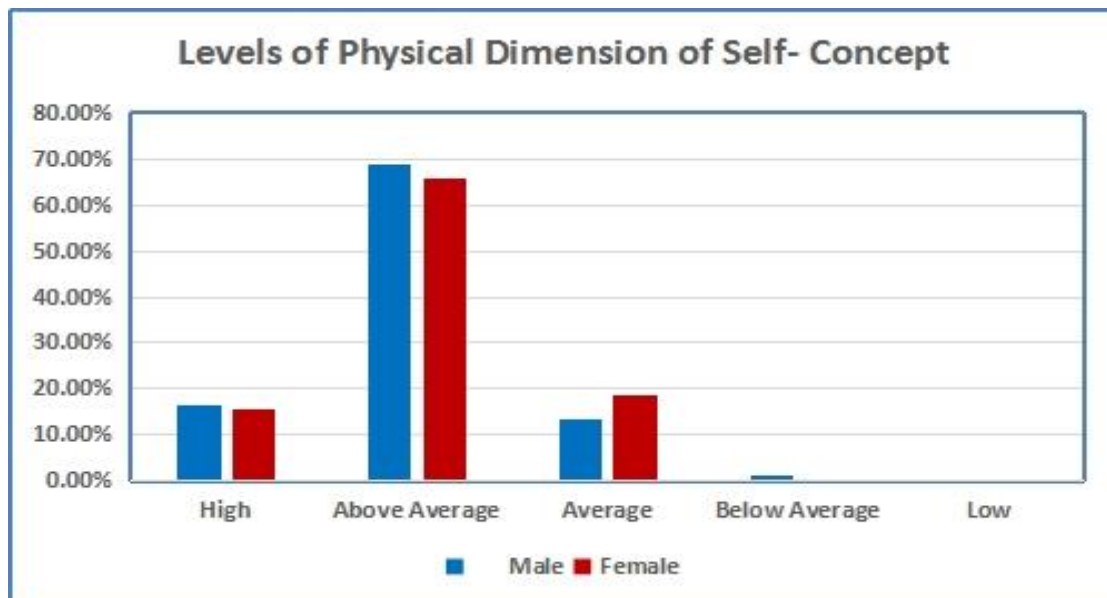


Fig 4.5.3 (1) Bar Diagram representing the level of Physical dimension of Self- Concept among male and female secondary school students

4.5.3 (2) Levels of Social Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (2)

Interpretation of values of Social Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	61	20.3%	55	18.3%
25 to 32	Above Average	190	63.3%	188	62.7%
17 to 24	Average	46	15.4%	55	18.3%
9 to 16	Below Average	3	1%	2	.7%
Up to 8	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 (2) In Social dimension of Self Concept male students have (20.3%) and female (18.3%) have high and male (63.3%) and female (62.7%) have above average level. While male (15.4%) and Female (18.3%) have average level and very negligible male (1%) and female (.7%) have below average level and there is (0%) low level student in Social dimension. Therefore, it can be said that the majority of the Secondary School students have above average level of Social Dimension of Self Concept.

Fig 4.5.3 (2)

Bar Diagram representing the level of Social dimension of Self- Concept among male and female secondary school students

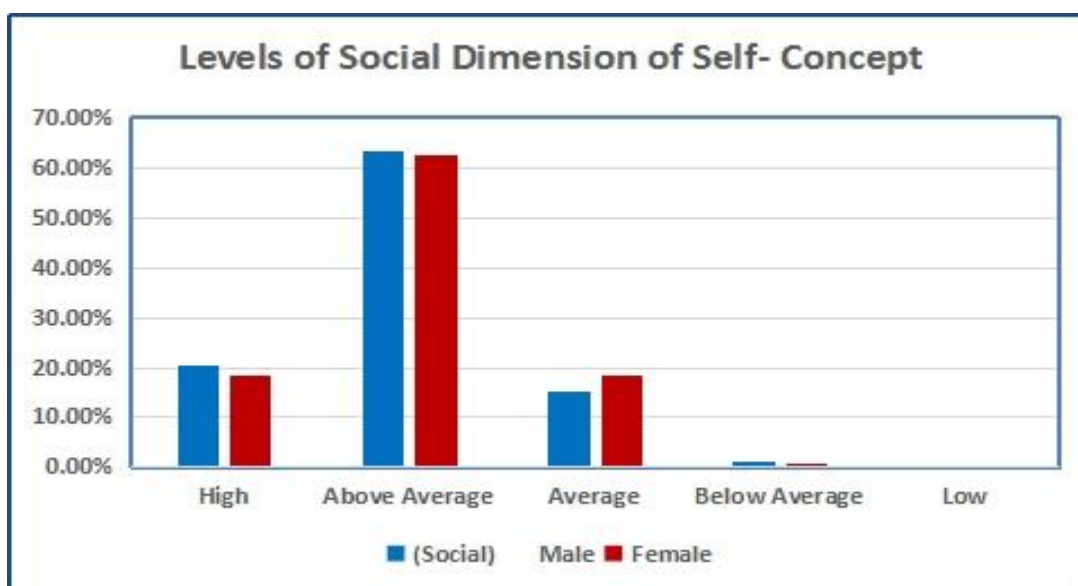


Fig 4.5.3 (2) Bar Diagram representing the level of Social dimension of Self- Concept among male and female secondary school students

4.5.3 (3) Levels of Temperamental Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (3)

Interpretation of values of Temperamental Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	63	21%	50	16.7%
25 to 32	Above Average	201	67%	213	71%
17 to 24	Average	35	11.7%	37	12.3%
9 to 16	Below Average	1	.3%	0	0%
Up to 8	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 (3) In Temperamental dimension male (21%) and female (16.7%) have high and male (67%) and female (71%) have above average level. While male (11.7%) and Female (12.3%) have average level and very negligible male (.3%) and female (0%) have below average level and there is (0%) low level student in Temperamental dimension. Therefore, it can be said that the majority of the Secondary School students have above average level of Temperamental Dimension of Self Concept.

Fig 4.5.3 (3)

Bar Diagram representing the level of Temperamental dimension of Self- Concept among male and female secondary school students

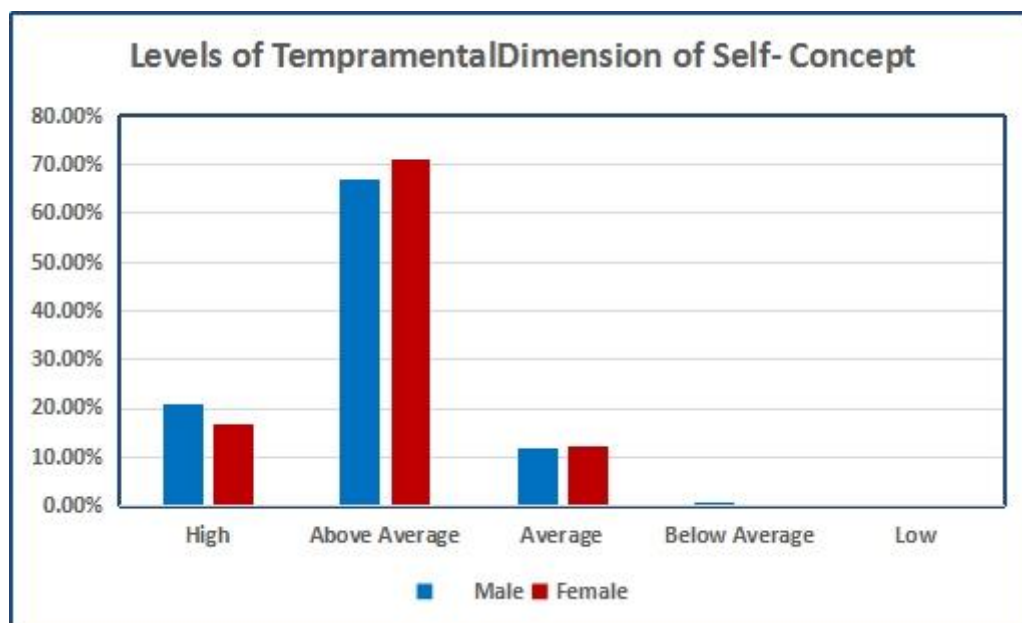


Fig 4.5.3 (3) Bar Diagram representing the level of Temperamental dimension of Self- Concept among male and female secondary school students

4.5.3 (4) Levels of Educational Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (4)

Interpretation of values of Educational Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	123	41%	139	46.3%
25 to 32	Above Average	150	50%	136	45.3%
17 to 24	Average	25	8.3%	25	8.3%
9 to 16	Below Average	2	.7%	0	0%
Upto 8	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 (4) In Educational dimension male (41%) and female (46.3%) have high and male (50%) and female (45.3%) have above average level. While male (8.3%) and Female (8.3%) have average level and very negligible male (.7%) and female (0%) have below average level and there is (0%) low level student in Educational dimension. Therefore, it can be said that the majority of the Secondary School students have high and above average level of Educational Dimension of Self Concept.

Fig 4.5.3 (4)

Bar Diagram representing the level of Educational dimension of Self- Concept among male and female secondary school students

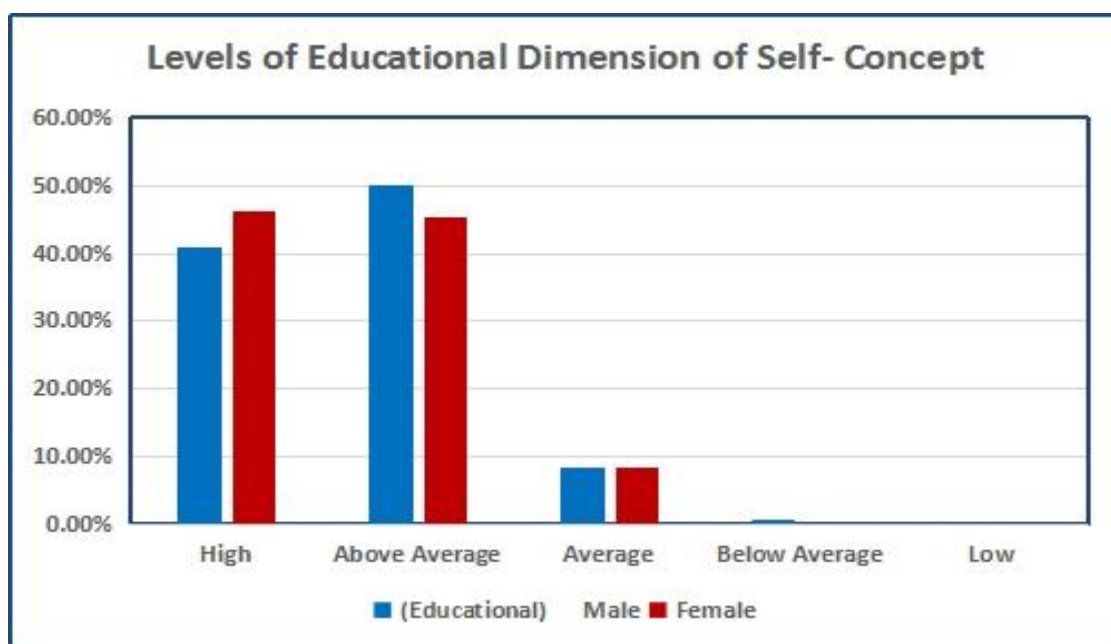


Fig 4.5.3 (4) Bar Diagram representing the level of Educational dimension of Self- Concept among male and female secondary school students

4.5.3 (5) Levels of Moral Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (5)

Interpretation of values of Moral Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	96	32%	118	39.3%
25 to 32	Above Average	177	59%	164	54.7%
17 to 24	Average	26	8.7%	17	5.7%
9 to 16	Below Average	1	.3%	1	.3%
Upto 8	Low	0	%	0	0%

It is evident from the above Table 4.5.3 (5) In Moral dimension male (32%) and female (39.3%) have high and male (59%) and female (54.7%) have above average level. While male (8.7%) and Female (5.7%) have average level and very negligible male (.3%) and female (.3%) have below average level and there is (0%) low level student in moral dimension. Therefore, it can be said that the majority of the Secondary School students have above average level of Moral Dimension of Self Concept.

Fig 4.5.3 (5)

Bar Diagram representing the level of Moral dimension of Self- Concept among male and female secondary school students

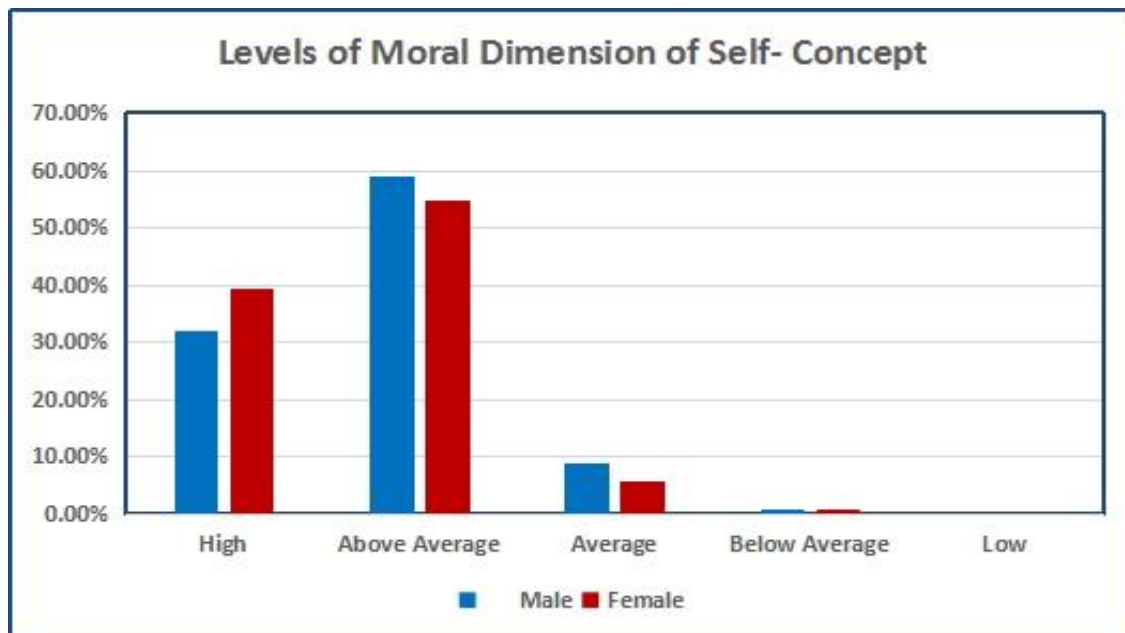


Fig 4.5.3 (5) Bar Diagram representing the level of Moral dimension of Self- Concept among male and female secondary school students

4.5.3 (6) Levels of Intellectual Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire.

Table 4.5.3 (6)

Interpretation of values of Intellectual Dimension of Self Concept among male and female secondary school students based on Self Concept Questionnaire

Score Range	Interpretation	Male	Percentage	Female	Percentage
33 to 40	High	23	7.7%	46	15.3%
25 to 32	Above Average	172	57.3%	162	54%
17 to 24	Average	102	34%	87	29%
9 to 16	Below Average	3	1%	5	1.7%
Up to 8	Low	0	0%	0	0%

It is evident from the above Table 4.5.3 (6) In Intellectual Dimension male (7.7%) and female (15.3%) have high level and male (57%) and female (54%) have above average level. While male (34%) and Female 29%) have average level and very negligible male (1%) and female (2%) have below average level and there is (0%) low level student in Intellectual dimension. Therefore, it can be said that the majority of the Secondary School students have above average level of Intellectual Dimension of Self Concept.

Fig 4.5.3 (6)

Bar Diagram representing the level of Intellectual dimension of Self- Concept among male and female secondary school students

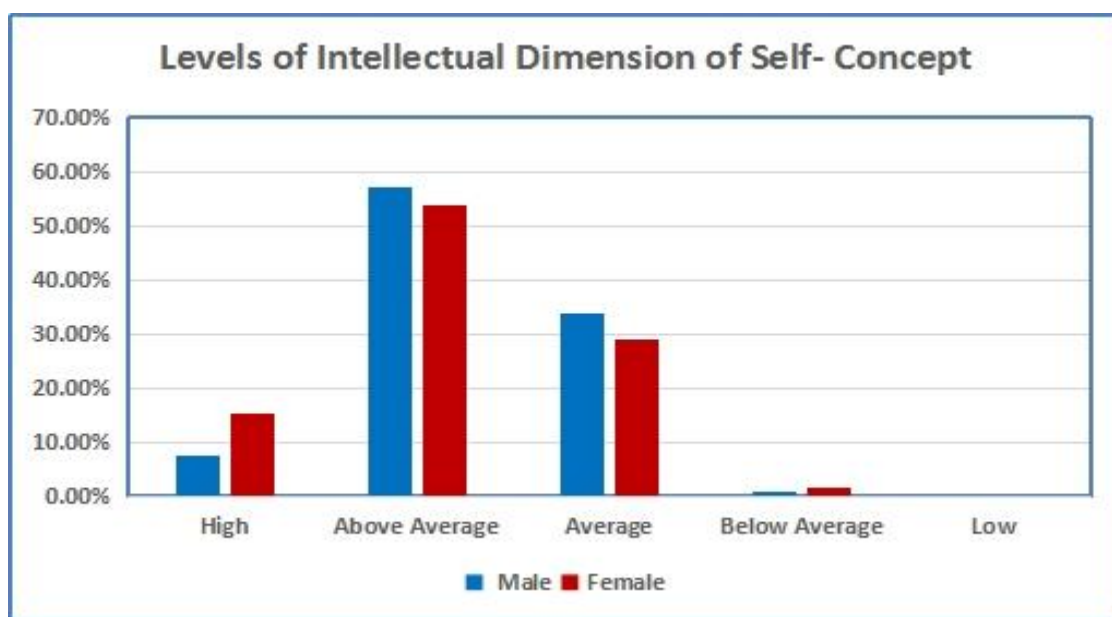


Fig 4.5.3 (6) Bar Diagram representing the level of Intellectual dimension of Self- Concept among male and female secondary school students

Descriptive statistics and t- Test Table with Analysis

4.5.4 Comparison between male and female secondary school students in relation to personality characteristics based on personality inventory.

To understand the difference between male and female secondary school students in relation to personality characteristics the following Hypothesis has been formulated.

- There is no significant difference between male and female secondary school students in relation to their personality characteristics.

To test the above hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.4

Results of t-test examining the difference between male and female secondary school students in relation to the variable of personality characteristics

Variable	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Personality Characteristics	64.22	12.21	66.72	14.70	2.26	0.02

**Significant at 0.05 level

*Table value of 't' at 0.05 level is 1.96

For overall Personality Characteristics it is evident from the above table 4.5.4 of an independent sample two-tailed *t*-test that there was significant difference between male and female secondary school students in relation to the personality Characteristics ($t(598)=2.26, P= 0.02$).

Hence the stated null hypothesis “*There is no significant difference between male and female secondary school students in relation to the variable of personality Characteristics*” is rejected

Figure 4.5.4

Bar graph depicting mean scores on personality characteristics among male and female secondary school students

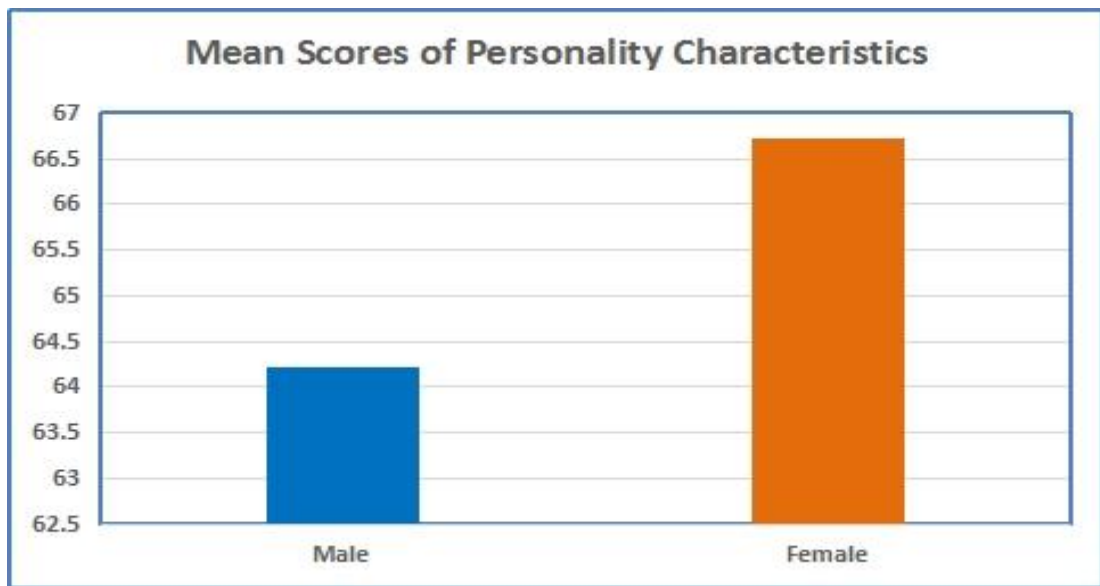


Fig 4.5.4 Bar graph showing the mean scores on personality characteristics among male and female secondary school students

4.5.4 (1) Comparison between male and female secondary school students in relation to six dimensions of personality characteristics based on personality inventory.

To understand the difference between male and female secondary school students in relation to six dimensions of personality characteristics the following six Hypotheses has been formulated.

- There is no significant difference between male and female secondary school students in relation to the dimension of *Activity - Passivity Trait* of personality inventory.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Enthusiastic and Non-Enthusiastic Trait* of personality inventory.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Assertive – Submissive trait* of personality inventory.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Suspicious- Trusting trait* of personality inventory.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Depressive-Non-Depressive trait* of personality inventory.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Emotional Instability and Emotional Stability trait* of personality inventory.

To test the above six hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.4 (1)

Results of t-test examining the difference between male and female secondary school students in relation to the six dimensions of personality characteristics

Dimensions of Personality Characteristics	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Activity - Passivity Trait	12.41	3.28	12.79	3.10	1.46	0.14
Enthusiastic - Non-Enthusiastic Trait	12.61	3.00	12.85	3.55	0.89	0.38
Assertive - Submissive Trait	10.79	3.28	11.37	3.47	2.11	0.04
Suspicious - Trusting Trait	9.26	3.54	8.92	4.00	1.09	0.28
Depressive - Non-Depressive Trait	10.28	3.41	11.12	3.38	3.02	0.002
Emotional Instability - Emotional Stability Trait	8.87	3.78	9.67	4.28	2.42	0.02

*Not Significant at 0.05 level.

**Significant at 0.05 level

*Table value of 't' at 0.05 level is 1.96

For six dimensions of Personality Characteristics it is evident from the table 4.5.4 (1) from an independent sample two-tailed *t*-test that the three dimensions of personality characteristics ie. Activity - Passivity Trait, Enthusiastic - Non-Enthusiastic Trait and Suspicious - Trusting Trait shows no significant difference between male and female secondary school students. Whereas significant difference was found between male and female secondary school students in other three

dimensions ie. Assertive – Submissive Trait, Depressive -Non-Depressive Trait and Emotional Instability and Emotional Stability Trait.

In *Activity- Passivity Trait* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the Activity- Passivity Trait ($t(598)=1.46, P= 0.14$).

In *Enthusiastic - Non-Enthusiastic Trait* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the Enthusiastic - Non-Enthusiastic Trait ($t(598)=0.89, P= 0.38$).

In *Assertive - Submissive Trait* it is evident from an independent sample two-tailed *t*-test that there was a significant difference between male and female secondary school students in relation to the Assertive - Submissive Trait ($t(598)=2.11, P= 0.04$).

In *Suspicious - Trusting Trait* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the Suspicious - Trusting Trait ($t(598)=1.09, P= 0.28$).

In *Depressive -Non-Depressive Trait* it is evident from an independent sample two-tailed *t*-test that there was a significant difference between male and female secondary school students in relation to the Depressive -Non-Depressive Trait ($t(598)=3.02, P= 0.002$).

In *Emotional Instability and Emotional Stability Trait* it is evident from an independent sample two-tailed *t*-test that there was a significant difference between male and female secondary school students in relation to the Emotional Instability and Emotional Stability Trait ($t(598)=2.42, P= 0.02$).

Hence the stated six null hypothesis

“There is no significant difference between male and female secondary school students in relation to the dimension of Activity - Passivity Trait of personality inventory” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Enthusiastic and Non-Enthusiastic Trait of personality inventory” Is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Assertive – Submissive trait of personality inventory” is rejected.

“There is no significant difference between male and female secondary school students in relation to the dimension of Suspicious- Trusting trait of personality inventory” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Depressive-Non-Depressive trait of personality inventory” is rejected.

“There is no significant difference between male and female secondary school students in relation to the dimension of Emotional Instability and Emotional Stability Trait of personality inventory” is rejected.

Figure 4.5.4 (1)

Bar graph depicting mean scores of six dimensions of Personality Characteristics among male and female secondary school students

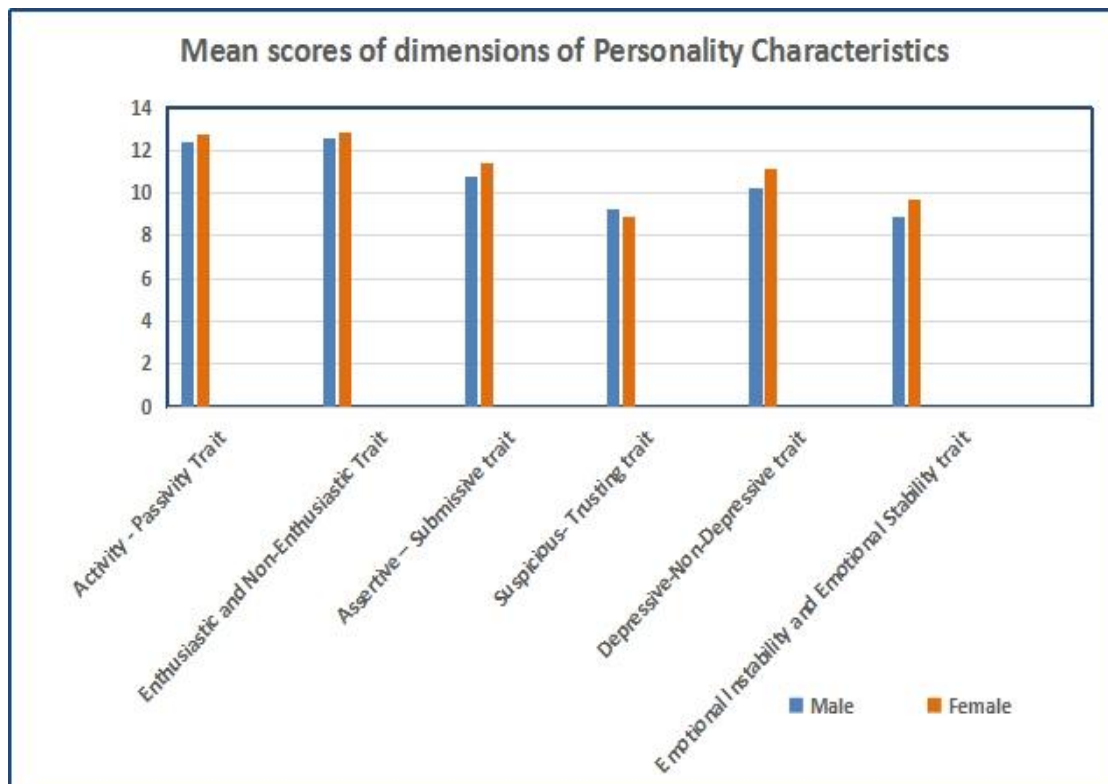


Fig 4.5.4 (1) Bar graph showing the mean scores of six dimensions of Personality Characteristics among male and female secondary school students

4.5.5 Comparison between male and female secondary school students in relation to Educational Aspiration based on Level of Educational Aspiration Test.

To understand the difference between male and female secondary school students in relation to Educational Aspiration the following Hypothesis has been formulated.

- There is no significant difference between male and female secondary school students in relation to their educational aspirations.

To test the above hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.5

Results of t-test examining the difference between male and female secondary school students in relation to the variable of Educational Aspiration

Variable	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Educational Aspiration	21.19	3.65	21.53	3.19	1.23	0.22

*Not Significant at 0.05 level.

*Table value of 't' at 0.05 level is 1.96

For overall Educational Aspiration it is evident from the above table 4.5.4 of an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the Educational Aspiration ($t(598)=1.23, P= 0.22$).

Hence the stated null hypothesis

“There is no significant difference between male and female secondary school students in relation to their educational aspirations” is accepted.

Figure 4.5.5

Bar Graph depicting mean scores on Educational Aspiration among male and female secondary school students

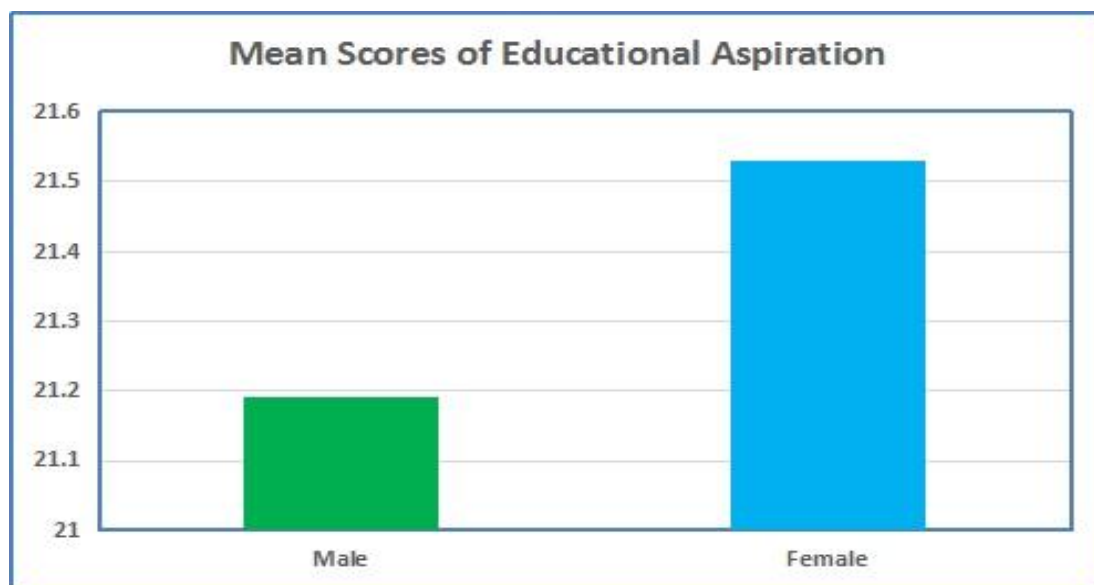


Fig 4.5.5 Bar graph showing the mean scores on Educational Aspiration among male and female secondary school students

4.5.5 (1) Comparison between male and female secondary school students in relation to the four dimensions of Educational Aspiration based on Level of Educational Aspiration Test.

To understand the difference between male and female secondary school students in relation to the four dimensions of Educational Aspiration the following four Hypotheses has been formulated.

- **There is no significant difference between male and female secondary school students in relation to the dimension of *Family Support* based on level of educational aspirations test.**

- There is no significant difference between male and female secondary school students in relation to the dimension of *Pupils' Views* based on level of educational aspirations test.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Pupils' Efforts* based on level of educational aspirations test.
- There is no significant difference between male and female secondary school students in relation to the dimension of *The Reality of Aspired Goals* based on level of educational aspirations test.

To test the above four hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.5 (1)

Results of t-test examining the difference between male and female secondary school students in relation to four dimensions of Educational Aspiration

dimensions of Educational Aspiration	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Family Support	5.10	1.22	5.27	1.00	1.85	0.06
Pupils' Views	7.17	1.54	7.32	1.34	1.32	0.18
Pupils' Efforts	5.17	1.62	5.23	1.59	0.48	0.63
The Reality of Aspired Goals.	3.75	1.05	3.71	1.02	0.51	0.60

*Not Significant at 0.05 level.

*Table value of 't' at 0.05 level is 1.96

For four dimensions of Educational Aspiration it is evident from the table 4.5.5 (1) from an independent sample two-tailed *t*-test that all the four dimensions of Educational Aspiration i.e. Family Support, Pupils' Views, Pupils' Efforts and The Reality of Aspired Goals shows no significant difference between male and female secondary school students.

In the dimension of *Family support* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Family support ($t(598)=1.85$, $P=0.06$).

In the dimension of *Pupils' view* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Pupils' view ($t(598)=1.32$, $P=0.18$).

In the dimension of *Pupils' Efforts* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of *Pupils' Efforts* ($t(598)=0.48$, $P=0.63$).

In the dimension of *The Reality of Aspired Goals* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of *The Reality of Aspired Goals* ($t(598)=0.51$, $P=0.60$).

Hence the stated four null hypothesis

“There is no significant difference between male and female secondary school students in relation to the dimension of Family Support based on level of educational

aspirations test” is accepted.

“*There is no significant difference between male and female secondary school students in relation to the dimension of Pupils' Views based on level of educational aspirations test*” is accepted.

“*There is no significant difference between male and female secondary school students in relation to the dimension of Pupils' Efforts based on level of educational aspirations test*” is accepted.

“*There is no significant difference between male and female secondary school students in relation to the dimension of The Reality of Aspired Goals based on level of educational aspirations test*” is accepted.

Figure 4.5.5 (1)

Bar Graph depicting mean scores on four dimensions of Educational Aspiration among male and female secondary school students

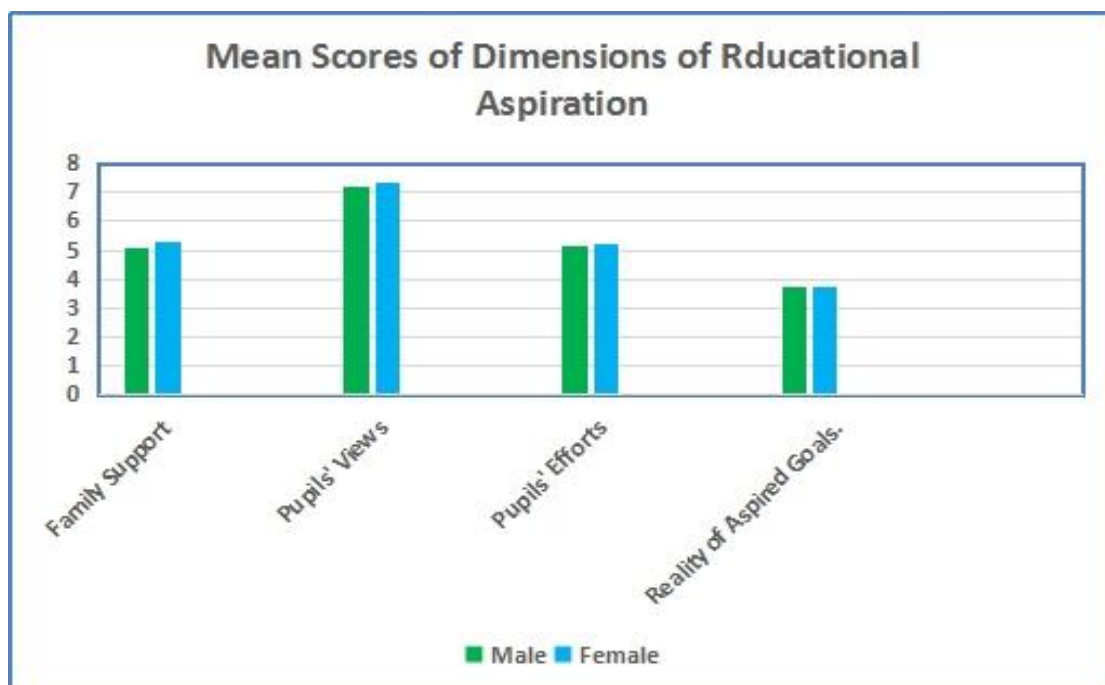


Fig 4.5.5 (1) Bar graph showing the mean scores on four dimensions of Educational Aspiration among male and female secondary school students

4.5.6 Comparison between male and female secondary school students in relation to Self- Concept based on Self- Concept Questionnaire.

To understand the difference between male and female secondary school students in relation to Self- Concept the following Hypothesis has been formulated.

- There is no significant difference between male and female secondary school students in relation to their Self-concept.

To test the above hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.6

Results of t-test examining the difference between male and female secondary school students in relation to the variable of Self-concept

Variable	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Self – Concept	174.16	16.49	175.70	17.15	1.12	0.26

*Not Significant at 0.05 level.

*Table value of ‘t’ at 0.05 level is 1.96

For overall Self Concept it is evident from the above table 4.5.6 of an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the Self-Concept ($t(598)=1.12, P=0.26$).

Hence the stated null hypothesis

“There is no significant difference between male and female secondary school students in relation to their Self-concept” is accepted.

Figure 4.5.6

Bar Graph depicting mean scores on Self Concept among male and female secondary school students

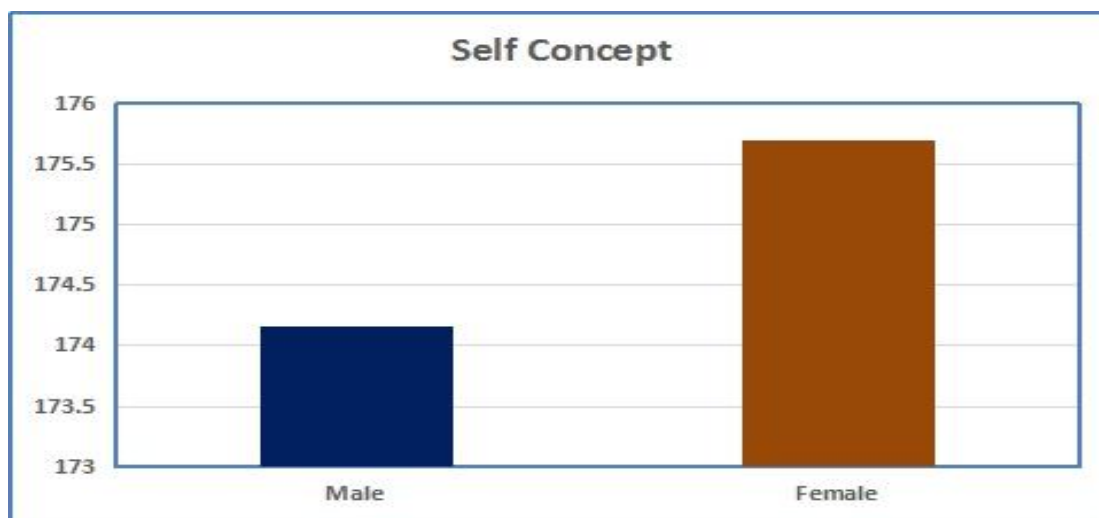


Fig 4.5.6 Bar graph showing the mean scores on Self Concept among male and female secondary school students

4.5.6 (1) Comparison between male and female secondary school students in relation to six dimensions of Self- Concept based on Self- Concept Questionnaire.

To understand the difference between male and female secondary school students in relation to the six dimensions of Self- Concept the following Hypothesis has been formulated.

- There is no significant difference between male and female secondary school students in relation to the dimension of *physical* based on self-concept questionnaire.
- There is no significant difference between male and female secondary school students in relation to the dimension of *social* based on self-concept questionnaire.

- There is no significant difference between male and female secondary school students in relation to the dimension of *Temperamental* based on self-concept questionnaire.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Educational* based on self-concept questionnaire.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Moral* based on self-concept questionnaire.
- There is no significant difference between male and female secondary school students in relation to the dimension of *Intellectual* based on self-concept questionnaire. To test the above six hypothesis, an independent sample two-tailed *t*-test has been conducted. The result of the test has been given below:

Table 4.5.6 (1)

Results of t-test examining the difference between male and female secondary school students in relation to the six dimensions of Self-concept

Dimensions of Self - Concept	Male(300)		Female(300)		t (598)	P
	M	SD	M	SD		
Physical	28.57	4.23	28.27	4.30	0.87	0.38
Social	28.7	4.28	28.45	4.68	0.69	0.48
Temperamental	29.17	3.88	28.96	4.00	0.64	0.52
Educational	31.17	4.81	31.66	4.56	1.26	0.20
Moral	30.39	4.16	31.19	4.19	2.38	0.01
Intellectual	26.16	4.26	27.2	4.19	2.63	0.01

*Not Significant at 0.05 level.

**Significant at 0.05 level

*Table value of 't' at 0.05 level is 1.96

For six dimensions of Self Concept it is evident from the table 4.5.6 (1) from an independent sample two-tailed *t*-test that four dimensions of self-concept i.e. Physical, Social, Temperamental and Educational dimensions shows no significant difference between male and female secondary school students. Whereas significant difference was found between male and female secondary school students in two dimensions i.e. moral and Intellectual dimension.

In *Physical dimension* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Physical dimension ($t(598)=0.87, P=0.38$).

In *Social dimension* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Social dimension ($t(598)=0.69, P=0.48$).

In *Temperamental dimension* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Temperamental dimension ($t(598)=0.64, P=0.52$).

In *Educational dimension* it is evident from an independent sample two-tailed *t*-test that there was no significant difference between male and female secondary school students in relation to the dimension of Educational dimension ($t(598)=1.26, P=0.20$).

In Moral *dimension* it is evident from an independent sample two-tailed t-test that there was a significant difference between male and female secondary school students in relation to the dimension of Moral dimension ($t(598)=2.38, P= 0.01$).

In Intellectual *dimension* it is evident from an independent sample two-tailed t-test that there was a significant difference between male and female secondary school students in relation to the dimension of Intellectual dimension ($t(598)=2.63, P= 0.20$).

Hence the stated six null hypothesis

“There is no significant difference between male and female secondary school students in relation to the dimension of physical based on self-concept questionnaire” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of social based on self-concept questionnaire” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Temperamental based on self-concept questionnaire” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Educational based on self-concept questionnaire” is accepted.

“There is no significant difference between male and female secondary school students in relation to the dimension of Moral based on self-concept questionnaire” is rejected.

“There is no significant difference between male and female secondary school students in relation to the dimension of Intellectual based on self-concept questionnaire” is rejected.

Figure 4.5.6 (1)

Bar Graph depicting mean scores on Self Concept along with its six dimensions among male and female secondary school students

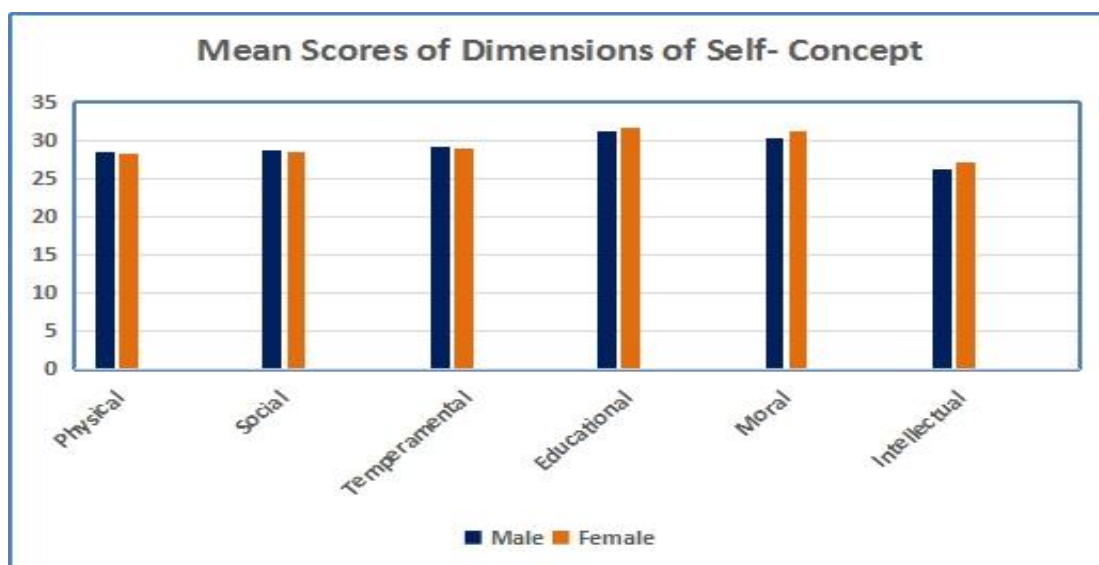


Fig 4.5.6 (1) Bar graph showing the mean scores on Self Concept along with its four dimensions among male and female secondary school students

Descriptive statistics with Correlation Table and Analysis

4.5.7 Relationship between the Personality characteristics and Educational Aspirations among secondary school students.

To understand the relationship between Personality characteristics and Educational Aspirations among male and female secondary school students the following Hypothesis has been formulated

- There is no significant relationship between the Personality characteristics and Educational Aspirations among secondary school students.

Table 4.5.7

Results of Pearson's Product moment correlation 'r' between the Personality characteristics and Educational Aspirations among secondary school students

Variable	N	Mean	SD	1	2
1. Personality Characteristics	600	65.47	13.55		
2. Educational Aspiration	600	21.36	3.43	0.006**	--

**p<0.01

A Pearson's r was computed to access the relationship between Personality Characteristics and Educational Aspiration. It is clear from the above table that the null hypothesis was accepted. $r(600) = 0.006$, $p < 0.01$. Hence it was concluded that there was negative correlation between the Personality characteristics and Educational Aspirations among secondary school students. This implies that change in Personality Characteristic in this group is not associated with a similar change in their level of Educational Aspiration. However this can't be misunderstood as a cause effect relationship between Personality characteristics and Educational Aspirations as the correlation only proves the association, and not the cause effect relationship.

4.5.8 Relationship between the Educational Aspirations and Self-concept among secondary school students.

To understand the relationship between Educational Aspirations and Self-concept among male and female secondary school students the following Hypothesis has been formulated

- There is no significant relationship between Educational Aspirations and Self-concept among secondary school students.

Table 4.5.8

Results of Pearson's Product moment correlation 'r' between Educational Aspirations and Self-concept among secondary school students

Variable	N	Mean	SD	1	2
1.Educational Aspiration	600	21.36	3.43		
2.Self-Concept	600	174.92	16.82	0.24**	--

**p<0.01

A Pearson's r was computed to access the relationship between Educational Aspiration and Self- Concept. It is clear from the above table that the null hypothesis was rejected. $r(600) = 0.24$, $p < 0.01$. Hence it was concluded that there was positive correlation between Educational Aspirations and Self- Concept among secondary school students. This implies that change in Educational Aspirations in this group is associated with a similar change in Self- Concept. However this can't be misunderstood as a cause effect relationship between Educational Aspirations and Self- Concept as the correlation only proves the association, and not the cause effect relationship.

4.5.9 Relationship between the Self-concept and Personality Characteristics among secondary school students.

To understand the relationship between Self-concept and Personality Characteristics among male and female secondary school students the following Hypothesis has been formulated.

- There is no significant relationship between Self-concept and Personality Characteristics among secondary school students.

Table 4.5.9

Results of Pearson's Product moment correlation 'r' between Self-concept and Personality Characteristics among secondary school students

Variable	N	Mean	SD	1	2
Self-Concept	600	174.92	16.82		
Personality Characteristics	600	65.47	13.55	0.08**	--

**p<0.01

A Pearson's r was computed to assess the relationship between Self-concept and Personality Characteristics. It is clear from the above table that the null hypothesis was accepted. $r(600) = 0.006$, $p < 0.01$. Hence it was concluded that there was negative correlation between the Self-concept and Personality Characteristics among secondary school students. This implies that change in Self-concept in this group is not associated with a similar change in their Personality Characteristics. However this can't be misunderstood as a cause effect relationship between Self-concept and Personality Characteristics as the correlation only proves the association, and not the cause effect relationship.