CHAPTER – VI
ANALYSIS AND INTERPRETATION OF DATA

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SECTION–A

RELATIONSHIP OF ANXIETY WITH ACADEMIC ACHIEVEMENT:

Table No.9 shows the relationship between anxiety and academic achievement of higher secondary students.

An important objective for which the study was designed was to study the relationship between academic achievement and anxiety of male and female higher secondary students on the basis of the results presented in table 9 it is clear that the obtained coefficient correlation is (0.102). This value is significant at .05 level. Therefore, the null hypothesis that there is no correlation between academic achievement and anxiety of higher secondary students has been rejected. This 'r' value indicates that there is significant low positive correlation between anxiety and academic achievement of higher secondary students.

Table No.10 showing the relationship between the dimensions of anxiety and academic achievement of higher secondary students.

The above table reveals the relationship between academic achievement and anxiety of higher secondary students. The purpose of computing co-relations was to observe the trends and patterns of relationship between achievement scores and dimensions of anxiety.
The first dimension of anxiety is "Examination and Academic Achievement". The obtained of 'r' value is (0.0430), which is insignificant. Therefore, the null hypothesis has been retained, this indicates that the examination and academic achievement has nothing to do with academic achievement at higher secondary level, whether the students are male or female.

The second dimension of anxiety is "classroom interaction" and the 'r' value is (0.128) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low positive correlation between the classroom interaction of anxiety with academic achievement of higher secondary students.

The third dimension of anxiety is "peer group relation" the obtained 'r' value is (0.231) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant low positive correlation between the peer group relation of anxiety with academic achievement of higher secondary students.

The forth dimension of anxiety is "Moral standards of behaviour" and the 'r' value is (0.426) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant moderate positive correlation between the moral standard of behaviour of anxiety with academic achievement of higher secondary students.
The fifth dimension of anxiety is family support and the 'r' value is (-0.448) which is significant at .01 level. Therefore, the null hypothesis has again been rejected, this indicates that there is significant moderate negative correlation between the family support of anxiety with academic achievement of higher secondary students. Therefore it can be concluded that family support of a student whether male or female, make him or her careless and tension free about his or her studies which adversely affects the academic achievement of a student.

Table No.11 shows the correlation between anxiety and academic achievement of higher secondary male students. The obtained 'r' value is (0.193). This value is significant at .01 level. Therefore, the null hypothesis has been rejected. This value indicates that there is significant very low positive correlation between the anxiety and academic achievement of higher secondary male students.

Table No.12 shows the dimension wise relationship between anxiety and academic achievement of higher secondary male students. This table reveals the dimension wise relationship between anxiety and academic achievement of higher secondary male students. The first dimension of anxiety is "Examination and academic achievement" and the 'r' value is (-0.033) which is insignificant. Therefore, the null hypothesis has been retained. This indicates that the examination and academic achievement" dimension of anxiety has
nothing to do with academic achievement at higher secondary male students.

The second dimension of anxiety is "classroom interaction" the 'r' value is (.025) which is insignificant. Therefore, the null hypothesis has been retained, this indicates that classroom interaction has nothing to do with academic achievement at higher secondary male students.

The third dimension of anxiety is "peer group relation" and the 'r' value is (0.144) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low positive correlation between the peer group relation of anxiety with academic achievement of higher secondary male students.

The fourth dimension of anxiety is "Moral Standard of behaviour" and the 'r' value is (-0.094) which is insignificant. Therefore, the null hypothesis has been accepted, this indicates that there is no significant relationship between the moral standard of behaviour of anxiety with academic achievement of higher secondary male students. Therefore, it can be concluded that higher degree of moral standard of behaviour has no significant effect on academic achievement of male students at higher secondary level.

The fifth dimension of anxiety is family support and the 'r' value is (0.149) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant
very low positive correlation between the family support of anxiety with academic achievement of higher secondary male students.

Table No.13 shows the relationship between anxiety and academic achievement of higher secondary female students.

As far as the female students are concerned a glance over the table shows the correlation between anxiety and academic achievement of higher secondary female students. The 'r' value is (-0.013). This value is insignificant. Therefore, the null hypothesis has been retained. This indicates that there is no significant relationship between anxiety and academic achievement of higher secondary female students. Anxiety of female students has nothing to do with their academic achievement.

Table No.14 shows the dimension wise relationship between anxiety and academic achievement of higher secondary female students.

A study of table makes it clear the dimension wise relationship between anxiety and academic achievement of higher secondary female students. The first dimension of anxiety is "examination and academic achievement" and the 'r' value is (0.03) which is insignificant. Therefore, the null hypothesis has been accepted, this indicates that the examination and academic achievement of anxiety
has nothing to do with academic achievement of higher secondary female students.

The second dimension of anxiety is "classroom interaction", the 'r' value is (0.100) which is significant at .05 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low positive correlation between interaction of anxiety and academic achievement of higher secondary female students.

The third component of anxiety i.e., peer group relation and the obtained 'r' value is (0.147) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low positive correlation between the peer group relation of anxiety with academic achievement of higher secondary female students.

The fourth dimension of anxiety is "moral standard behaviour" and the obtained 'r' value is (0.221) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant low positive correlation between the moral standard of behaviour of anxiety with academic achievement of higher secondary female students. It reveals that higher the degree of moral standard of behaviour is helpful in academic achievement of female students at higher secondary level.
The fifth dimension of anxiety is "family support" and the obtained 'r' value is (–0.231) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant low negative correlation between the "family support of anxiety" with academic achievement of female students at higher secondary level. Hence, it can be interpreted that family support of female higher secondary student lower down their academic achievement.
SECTION–B:

RELATIONSHIP OF SELF-CONCEPT WITH ACADEMIC ACHIEVEMENT:

Table No.15 shows the relationship between self-concept and academic achievement of higher secondary students.

Another important objective of the study was to study the relationship between self-concept and academic achievement of higher secondary students. The Pearson's product moment correlation technique was used for computing coefficients of correlation. This technique of correlation was decided by observing the assumptions of Pearson's method. The obtained coefficient correlation is (0.190). This value is significant at .01 level. Therefore, the null hypothesis which was that there is no correlation between academic achievement and self-concept of higher secondary students has been rejected. This 'r' value indicates that there is significant very low positive correlation between self-concept and academic achievement.

Table No.16 shows the component wise relationship between Self-concept and academic achievement of higher secondary students.

This table reveals the relationship between the dimensions of self-concept and academic achievement of higher secondary students. The purpose of computing correlations was to observe the trends and pattern of relationship between achievement scores and dimensions of self-concept. The first dimension of self-concept is "health and sex-
appropriateness" and the 'r' value is (0.144) which is significant at 0.1 level. Therefore, the null hypothesis was rejected. The 'r' value indicates that there is significant very low positive correlation between the health and sex appropriateness of self-concept and academic achievement of higher secondary students.

The second dimension of self-concept is 'Abilities' and the 'r' value (0.013) which is insignificant. Therefore, the null hypothesis has been retained, this indicates that the abilities of self-concept have nothing to do with academic achievement of higher secondary students.

The third dimension of self-concept is 'self-confidence' and the 'r' value is (0.025) which is insignificant. Therefore, the null hypothesis has been accepted, this indicates that the self-confidence of self-concept has nothing to do with academic achievement of higher secondary students.

The fourth dimension of self-concept is "self-acceptance" and the 'r' value is (–0.169) which is significant at .01 level. Therefore, the null hypothesis was rejected, this indicates that there is significant very low negative correlation between the self-acceptance of self-concept and academic achievement of higher secondary students.

The fifth dimension of self-concept is "worthiness" and the 'r' value is (0.125) which is significant at .01 level. Therefore, the null
hypothesis was rejected, this indicates that there is significant very low positive correlation between the worthiness of self-concept and academic achievement of higher secondary students.

The sixth dimension of self-concept is "Present, past and future" and the 'r' value is (0.116) which is significant at .01 level. Therefore, the null hypothesis was rejected. This indicates that there is significant very low positive correlation between the "present, past and future" of self-concept and academic achievement of higher secondary students.

The seventh dimension of self-concept is "Beliefs and Convictions" and the 'r' value is (−0.12530) which is significant at .01 level. Therefore, the null hypothesis was rejected, this indicates that there is significant very low negative correlation between the "Beliefs convictions" of self-concept and academic achievement of higher secondary students.

The eight dimension of self-concept is "Feeling of same guilt" and the 'r' value is (0.2596) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant low positive relationship between the "Feeling of same guilt of self-concept and academic achievement of higher secondary students.

The ninth dimension of self-concept is "Sociality" and the 'r' value is (−0.126) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant
very low negative correlation between sociability of self-concept and academic achievement of higher secondary students.

The tenth dimension of self-concept is 'emotional' and 'r' value is (0.083) which is insignificant. Therefore, the null hypothesis has been accepted, this indicates that the "Emotional" self-concept has nothing to do with the achievement of higher secondary students.

Table No.17 shows the relationship between self-concept and academic achievement of higher secondary male students.

The above table reveals the relationship between self-concept and academic achievement of male higher secondary students. The obtained coefficient correlation is (0.172). This value is significant at 0.1 level. Therefore, the null hypothesis which was that there is no correlation between academic achievement and self-concept of higher secondary male student has been rejected. The 'r' value indicates that there is significant positive correlation between self-concept and academic achievement of higher secondary students.

Table No.16 shows the relationship between the dimensions of self-concept and academic achievement of higher secondary male students. This above table reveals the relationship between the dimensions of self-concept and academic achievement of higher secondary male students. The first dimension of self-concept is "Health and Sex appropriateness" and the 'r' value is (0.282) which is significant at .01 level. Therefore, the null hypothesis has been
rejected. The 'r' value indicates that there is significant relationship between the "Health and Sex appropriateness" self-concept and academic achievement of higher secondary male students.

The second dimension of self-concept is "Abilities" and the value 'r' is (0.080) which is insignificant. Therefore the null hypothesis has been retained, this indicates that the abilities of self-concept has nothing to do with academic achievement of higher secondary male students.

The third dimension of self-concept is "Self-confidence" and the 'r' value is (−0.062) which is insignificant. Therefore, the null hypothesis has been accepted, this indicates that the self-confidence has nothing to do with academic achievement of higher secondary male students.

The fourth dimension of self-concept is "Self-acceptance" and the 'r' value is (−0.187) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low negative correlation between the self-acceptance of self-concept between the self-acceptance of self-concept and academic achievement of higher secondary male students.

The fifth dimension of self-concept is "worthiness" and the 'r' value is (0.319) which is significant at .01 level. Therefore the null hypothesis was rejected this indicates that there is significant low
positive correlation between the worthiness of self-concept and academic achievement of higher secondary male students.

The sixth dimension of self-concept is "Present, past and future" and the 'r' value is (0.099) which is significant at (0.05) level. Therefore, the null hypothesis has been rejected, this indicates that there is significant positive correlation between the present, past and future of self-concept and academic achievement of higher secondary male students.

The seventh dimension of self-concept is "beliefs and convictions" and the 'r' value is (–0.002) which is insignificant. Therefore, the null hypothesis has been accepted this indicates that beliefs and convictions of self-concept has nothing to do with academic achievement of higher secondary male students.

The eighth dimension of higher secondary students is "feeling of same guilt" and the 'r' value is (0.305) which is significant at .01 level. Therefore, the null hypothesis has been rejected this indicates that there is significant low positive correlation between the "feeling of same guilt" of self-concept and academic achievement of higher secondary male students.

The ninth dimension of self-concept is "sociability" and the 'r' value is (–0.039) which is insignificant. Therefore, the null hypothesis
has been accepted this indicates that 'sociability' has nothing to do with academic achievement of male students.

The tenth dimension of self-concept is "Emotional" and the 'r' value is (0.212) which is significant at .01 level. Therefore, the null hypothesis was rejected this indicates that there is significant low positive correlation between emotional self-concept and academic achievement of higher secondary male students.

Table No.19 shows the relationship between self-concept and academic achievement of higher secondary female students. The Pearson's correlation technique was used for computing coefficients of correlation. The above table reveals the correlation between the self-concept and academic achievement of higher secondary female students. The obtained coefficient correlation 'r' is (0.240). This value is significant at .01 level. Therefore, the null hypothesis which was that there is no correlation between academic achievement and self-concept of higher secondary female students has been rejected. The 'r' value indicates that there is significant relationship between self-concept and academic achievement of higher secondary female students.

Table No.20 shows the relationship between dimensions of self-concept and academic achievement of higher secondary female students.
This table reveals the dimension wise relationship between self-concept and academic achievement of higher secondary female students. The first dimension of self-concept is "Health and Sex appropriateness" and the 'r' value is (–0.10760) which is significant at 0.05 level. Therefore, the null hypothesis has been rejected. The 'r' value indicates that there is significant very low negative correlation between health and sex appropriateness self-concept and academic achievement of higher secondary female students.

The second dimension of self-concept is "abilities" and the 'r' value is (0.2348) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant low positive correlation between Abilities of self-concept and academic achievement of higher secondary female students.

The third dimension of self-concept is "self-confidence" and the 'r' value is (0.247) which is significant at .01 level. Therefore, the null hypothesis has been rejected. This indicates that there is significant low positive correlation between the "self-confidence" of self-concept and academic achievement of higher secondary female students.

The fourth dimension of self-concept is self-acceptance and 'r' value is (–0.055) which is insignificant. Therefore, the null hypothesis has been retained this indicates that the "self-acceptance" of self-concept has nothing to do with academic achievement of higher secondary female students.
The fifth dimension of self-concept is "worthiness" and the 'r' value is (−0.137) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low negative correlation between the "worthiness" of self-concept and academic achievement of higher secondary female students.

The sixth dimension of self-concept is 'present, past and future' and the 'r' value is (0.136) which is significant .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant positive relationship between the "present, past and future" of self-concept and academic achievement of higher secondary female students.

The seventh dimension of self-concept is "beliefs and convictions" and the 'r' value is (0.098), which is significant at (0.05) level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low positive relationship between "Beliefs and convictions" of self-concept and academic achievement of higher secondary female students.

The eighth dimension of self-concept is "feeling of same guilt" and the 'r' value is (−0.013) which is insignificant. Therefore, the null hypothesis has been accepted this indicates that feeling of same guilt of self-concept has nothing to do with academic achievement of higher secondary female students.
The ninth dimension of self-concept is "sociability" and the 'r' value is (−0.073) which is insignificant. Therefore, the null hypothesis has been accepted this indicates that "sociability" of self-concept has nothing to do with academic achievement of higher secondary female students.

The tenth dimension of self-concept is "emotional" and the 'r' value is (−0.1869) which is significant at .01 level. Therefore, the null hypothesis has been rejected, this indicates that there is significant very low negative correlation between emotional self-concept and academic achievement of higher secondary female students. This indicates that higher degree of emotional self-concept of female students affects adversely on the academic achievement of higher secondary female students.
SECTION–C:

RELATIONSHIP OF LEVEL OF ASPIRATION WITH ACADEMIC ACHIEVEMENT:

Table No.21 shows the relationship of level of aspiration with academic achievement of higher secondary students.

An important objective of the study for which it was designed is to study the relationship of academic achievement with level of aspiration of higher secondary students. The Pearson's correlation technique was used for computing coefficients of correlation. The obtained coefficient correlation 'r' is (0.204). This value is significant at .01 level. Therefore, the null hypothesis which was that there is no correlation between academic achievement and level of aspiration of higher secondary students has been rejected. The 'r' value indicates that there is significant low positive correlation between level of aspiration and academic achievement of higher secondary students.

Table No.22 shows the relationship between level of aspiration and academic achievement of higher secondary male students. This table reveals the correlation between level of aspiration and academic achievement of higher secondary male students. The obtained coefficient correlation is 0.258. This value is significant at .01 level. Therefore the null hypothesis which was that there is no correlation between academic achievement and level of aspiration of higher secondary male students has been rejected. The 'r' value indicates that
there is significant low positive correlation between level of aspiration and academic achievement of higher secondary male students.

Table No.23 shows the relationship between level of aspiration and academic achievement of higher secondary female students. This table reveals the correlation between level of aspiration and academic achievement of higher secondary female students. The obtained coefficient correlation is (0.132). This value is significant at .01 level. Therefore, the null hypothesis which was that there is no relationship between academic achievement and level of aspiration of higher secondary female students has been rejected. The 'r' value indicates that there is significant very low positive relationship between level of aspiration and academic achievement of higher secondary female students.
SECTION–D:

MULTIVARIATE RELATIONSHIP OF ANXIETY, SELF-CONCEPT, LEVEL OF ASPIRATION AND ACADEMIC ACHIEVEMENT:

Table No.24 shows the multiple regression weights of various predictors for higher secondary students.

This table shows the regression weights of various predictors for higher secondary students. The obtained 'F' value is greater than table value at both 0.05 and 0.01 levels of significance. It may be interpreted that the multiple correlation is highly significant. As $R^2_{C.123}=0.077$, it can be said that 7 percent variance of orientation variables may be predicted by joint three predictors. Further more on the basis of regression equation it appears that $X_1$ predictor (Anxiety) contributes lowest while contribution of $X_3$ (level of aspiration) is the highest in case of higher secondary students. As regard the self-concept its contribution is greater than anxiety but less than level of aspiration.

Table No.25 shows the multiple regression weights of various predictors for higher secondary male students. This table shows the regression weights of various predictors for male higher secondary students. The obtained F-value is greater than the table value at both 0.05 and 0.01 level of significance. It may be interpreted that multiple
correlation is highly significant. As $R^2_{C.123}=0.119$, it can be said that 11 percent variance of criterion variable may be predicted by joint three predictors. Furthermore, on the basis of regression equation it appears that $X_2$, predictor (self-concept) contribution is lowest while contribution of $X_3$ (level of aspiration) is the highest in case of male higher secondary students. As regard the anxiety its contribution is greater than self-concept but less than level of aspiration.

Table No.26 shows the multiple regression weights of various predictors for higher secondary female students.

This table shows the regression weights of various predictors for female higher secondary students. The obtained F-value is greater than the table value at both 0.05 and 0.01 level of significance. It may be interpreted that multiple correlation is highly significant. (As $R^2_{C.123}=.074$), it can be said that 7 percent variance of criterion variable may be predicted by joint three predictors. Furthermore, on the basis of regression equation it appears that $X_1$ predictor (Anxiety) contributes lowest while contribution of $X_3$ (level of aspiration) is the highest in case of female higher secondary students. As regard the self-concept its contribution is greater than anxiety but less than level of aspiration.