A MULTI-VARIATE STUDY OF ANXIETY, SELF-CONCEPT AND LEVEL OF ASPIRATION WITH ACADEMIC ACHIEVEMENT FOR HIGHER SECONDARY STUDENTS

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ABSTRACT

In the present study an attempt has been made to investigate the multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement. The manifest anxiety scale of Dr. S.C. Joshi, Self-concept inventory by Dr. Mukta Rani Rastogi and level of aspiration by Dr. Bhargava and Shah were administered on the 147 higher secondary students. To find out the multiple correlation was carried out. It was found that multiple correlation is highly significant and level of aspiration predictor contributes highest while anxiety predictor contributes lowest in higher secondary female students and higher secondary students. Whereas self-concept predictor contributes lowest and level of aspiration predictor contributes higher in male higher secondary students.

INTRODUCTION:

Academic achievement has long been recognized as one of the important goals of education the world over. However, it is general observation that learners placed in an identical set of academic situations vary in their scholastic achievement. Research conducted to prove into the academic achievement phenomenon, has convincingly, demonstrated that the academic achievement is product of a number of factors.

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operating within the individual and outside him. Of these types of factors, it has now been fairly established that the emotional factors most particularly the anxiety and environmental factors like self concept and levels of aspiration largely determined one's academic achievement. The psychology of higher secondary student who is no longer a child and not yet an adult too is an important area in the study of human behaviour.

Self-concept is the picture the individual has of himself and his evaluation of the picture change in an individual as behaviour and attitudes of others seem to follow changes in his attitude towards himself. The self-concept influences the behaviour of adolescents. Level of aspiration is a form of self-motivation involving competition with one's own past performance. An individual sets himself a new standard or goal to achieve. He tries to do better than he did before, raising his goal in every new attempt. Thus, knowledge of the extent to which anxiety, self concept and level of aspiration exert influence on academic achievement, could be of great interest in the field of education. The investigator therefore thought it proper to make a systematic study ascertaining multivariate relationship among anxiety, self-concept and level of aspiration with academic achievement of higher secondary students.

OPERATIONAL DEFINITIONS:

**Academic Achievement:** Academic achievement refers to the average marks obtained by an individual in the final examinations.

**Anxiety:** Anxiety is an inhibitive state of the individual which obstructs him in achieving the objectives.
**Self-concept:** Self-concept refers to the way the individual perceives his own qualities and characteristics. Self-concept of an individual changes with time and experiences.

**Level of Aspiration:** Level of aspiration of an individual is future expectation or ambition. It is a form of self motivation involving competition with one's own past performances. It is usually influenced by two types of factors environmental and personal.

**OBJECTIVES OF THE STUDY:**

1. To study the multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary students.
2. To study the multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary male students.
3. To study the multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary female students.

**HYPOTHESES OF THE STUDY:**

1. There is no multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary students.
2. There is no multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary male students.

3. There is no multivariate relationship of anxiety, self-concept and level of aspiration with academic achievement for higher secondary female students

**Method of the Study:** For the purpose of the present study, ex-post facto method has been used.

**Population:** All the higher secondary students of class XI of the schools of Meerut district comprised the population of our study.

**Sample:** About 417 boys and girls of XI grade were selected from different schools of Meerut district through simple random sampling.

**Variable Involved:** This study has four variables namely, anxiety, self-concept, level of aspiration as independent variable and academic achievement as dependent variable.

**Tools Used:** Anxiety scale of Dr. S.C. Joshi, Self-concept inventory by Dr. Mukta Rani Rastogi and level of aspiration by Dr. Bhargava and Shah were used.

**Procedure:** Self-concept scale was administered on 417 boys and girls of XI grade thereafter the scoring was done.

**Statistical Techniques to be used:**

In order to achieve the objectives of the study and for testing the hypothesis, data will be analysed by using appropriate statistical multiple
correlation (Alitken's method) was used.

RESULT AND DISCUSSION:

Table - 1

Multiple Regression equation of various Predictors for Higher Secondary Students

\[ R^2 = b_1 r_{c1} + b_2 r_{c2} + b_3 r_3 \]
\[ R^2 = (.035 \times .10210) + (.207 \times .19030) + (.171 \times .20410) \]
\[ = (.00357) + (.0393) + (.03490) \]
\[ R^2 = (.7777) \text{ or } R = (.2790) \]

\[ F = \frac{R^2}{1 - R^2} \times \frac{N - K - 1}{4} = \frac{.07777}{1 - .07777} \times 103 = \frac{8.01958}{.92223} \]

Here \((N = 417 \text{ and } K = 4)\)
\[ F = 8.69** \]

** Significant at both .05 and .01 level of significance

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.

Table - 2

Multiple Regression equation of various Predictors for Higher Secondary Male Students

\[ R^2 = b_1 r_{c1} + b_2 r_{c2} + b_3 r_3 \]
\[ R^2 = (.125 \times .19) + (.185 \times .17) + (.231 \times .28) \]
\[ = (.0237) + (.0314) + (.064) \]
\[ R^2 = (.1191) \text{ or } R = (0.0345) \]

\[
F = \frac{R^2}{1-R^2} \times \frac{N-K-1}{4}
\]

Here (N = 417 and K = 4)

\[
F = \frac{.1191}{1-.1191} \times 103
\]

\[ F = (13.925)^*\]

** Significant at both .05 and .01 level of significance

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.

Table – 3

**Multiple Regression equation of various Predictors for Higher Secondary Female Students**

\[ R^2 = b_1r_{c1} + b_2r_{c2} + b_3r_3 \]

\[ R^2 = (.051 \times -.01) + (.234 \times .24) + (.128 \times .13) \]

\[ = (-.00051) + (.05616) + (.01664) \]

\[ R^2 = (.07229) \text{ or } R = (0.272) \]

\[
F = \frac{R^2}{1-R^2} \times \frac{N-K-1}{4}
\]

Here (N = 417 and K = 4)

\[
F = \frac{.072 \times 103}{1-.072} \times \frac{.07229}{.92771} \times 103
\]

\[ F = (8.03)^*\]

** Significant at both .05 and .01 level of significance**
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.

**CONCLUSIONS:**

Thus, the plausible explanation for this finding is that the level of aspiration and self-concept of a student contributes a lot to do his or her work with full concentration and anxiety make a student more depressed. Thus the multiple correlation is highly significant.