ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS

HAVING DIFFERENTIAL LEVEL OF ACADEMIC ANXIETY

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ABSTRACT

This study is undertaken with a view to find out the academic achievement of secondary school students having differential level of Academic Anxiety. It was hypothesized that there exists a significant difference in academic achievement of secondary school learners having differential level i.e. high, moderate and low level of Academic Anxiety. For verification of the hypotheses, the data were collected by administering 'Academic Anxiety Scale For Children (AASC) on 200 secondary school students of Mandi district of Himachal Pradesh by adopting lottery method of random sampling. The statistical technique used was one way ANOVA. The findings of the present study revealed that the Academic Anxiety and academic achievement both are highly correlated to each other. High Academic Anxiety results in low academic achievement and vice-versa. It was also found that the academic achievement of girls were better than boys. In the end, results have been discussed and implications have been made.

Key Words: Academic Achievement, Academic Anxiety, Gender and Secondary School Students.

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INTRODUCTION:

Academic achievement refers to the performance of the students in various subjects of the curriculum during the whole academic year. It is the amount of knowledge derived for learning in educational institutions. Any behavior that is learned may come with in the scope of achievement. In ones' life academic success is highly valued. Now- a- days competition has become very indispensable to get a place in society. According to Good (1943), "Achievement means accomplishment or performance in given skills or body of knowledge." A great education achievement is one design to measure knowledge, understanding to skill on a specified subjects or group of subjects.

Achievement is the end product of all educational endeavors. The main concern of all educational efforts is to see that the teacher achieves. The world is becoming more and more competitive .Quality of performance has become the key factor for personal growth. People

desire for excellence in academics. This desire for high level of achievement puts a lot of pressure on students, teachers, and school and in general the educational system itself.

Academic Anxiety is a common issue that students cannot ignore if they want to succeed in school. It often lead to problems concentrating while studying and remembering information while completing tests, which makes the students feel helpless and like a failure. If academic anxiety is not properly addressed, it can have many serious and lasting consequences, such as causing a student to procrastinate, perform poorly on schoolwork, fail classes and withdraw from socializing with peers or pursuing activities that interest him.

According to Cornell University, Academic Anxiety is the result of biochemical processes in the body and the brain that make your attention level increase when they occur. The changes happen in response to exposure to a stressful academic situation, such as completing school assignments presenting a project in class or taking a test. When anxiety becomes too great, the body recoils as if threatened, which is a normal fight or flight reaction.

The relationship between anxiety and impaired academic achievement has been well documented by a number of investigators (Sharma and Rao; 1984, Sud and Sharma, 1989; Sud, 1994; Sud and Sharma, 1990). Anxiety is common symptom found in different population especially among students. Anxiety is a special variety of fear experience in response to an anticipated threat of self esteem. Further (Hussain, 1977; Gupta, 1987; Ramachandran , 1990 ; Namarta, 1992 ; Albero et al.,1997 ; Chapell, 2005; and Parvathamma, 2010) found that high academic Anxiety had adverse effect on academic performance.

A manageable level of Academic Anxiety is actually a good thing. Moderate Academic Anxiety provides the motivation students require to exert effort completing assigned schoolwork and preparing to take examinations. Academic Anxiety only becomes a problem that needs a solution when the amount experienced grows so excessive that a student is no longer able to function.

OBJECTIVES:

1. To compare the academic achievement of secondary school learners having high, moderate and low level of Academic Anxiety.

2. To compare the academic achievement of male learners having high, moderate and low level of Academic Anxiety.

3. To compare the academic achievement of female learners having high, moderate and low level of Academic Anxiety.

HYPOTHESES:

H_1 – There will be significant difference in academic achievement of secondary school learners having high, moderate and low level of Academic Anxiety.

H_2 – There will be significant difference in academic achievement of secondary school boys having high, moderate and low level of Academic Anxiety.

H_3 - There will be significant difference in academic achievement of secondary school girls having high, moderate and low level of Academic Anxiety.

METHOD:

For conducting the present investigation, 'Survey Technique under Descriptive Method of Research' was used.

SAMPLE:

In the present study, a representative sample of 200 students studying in class 10th from Mandi districts of Himachal Pradesh. For this purpose, the investigator used purposive sampling for the selection of schools. But students were selected by adopting lottery method of random sampling.

RESEARCH TOOLS:

➢ Academic Anxiety Scale for Children (AASC) developed and standardized by Dr. A.K. Singh and Dr. (KM) A. Sen Gupta.

➢ To measure the academic achievement, the marks of sampled students in their previous examination i.e. marks of class 9th were taken as their academic achievement score.

STATISTICAL TECHNIQUE:

In order to obtain empirical verification of the proposed hypotheses, the data was analyzed by applying one way ANOVA.

- One way ANOVA is used to find out the relationship between independent and dependant variables i.e. F- test is applied.

RESULTS AND INTERPRETATIONS:

1.) Study of significance of difference among the mean scores on academic achievement of secondary school learners having differential level of Academic Anxiety. Since the fundamental purpose of the study is to find out whether the academic achievement of secondary school learners having differential level of Academic Anxiety differs or not. For analyzing this, the secondary school learners were categorized into three categories on the basis of their Academic Anxiety scores. Learners having scores 14 or above are regarded as high anxiety group, the scores falling in the range 11-13 as moderate anxiety group and remaining as low anxiety group with a score of 10 and below. In order to find out the differences in the academic achievement scores of learners having differential level of Academic Anxiety, their respective scores on academic achievement were taken into consideration and the significance of differences among the mean values of these three levels of scores have been calculated by means of adopting the one way ANOVA. The results obtained subsequently have been presented in table- 1.

Table-1

Significance of difference among the mean scores on academic achievement of secondary school learners having differential level of Academic Anxiety.

Source of variation	Sum of squares	df	Mean square	F-ratio	Remarks
Between sets	16838	2	8419		
Within sets	97950	197	497	16.93	Significant
Total	114788	199	8916		

An analysis of the table -1 reveals that the F –ratio as 16.93 which is greater than both the values of F-ratio at 0.05 and 0.01 levels of significance i.e. 3.04 and 4.71 with the df value of 2

and 197. Since the calculated value of f-ratio is greater than the table value which is significant. Hence, the hypothesis i.e. there will be significant difference in academic achievement of secondary school learners having differential level of Academic Anxiety is accepted.

2.)   Study of significance of difference among the mean scores on academic achievement of secondary school boys having differential level of Academic Anxiety.

The second hypothesis is framed for verification whether the academic achievement of Secondary school boys having high, moderate and low level of Academic Anxiety differs or not.

Table-2

Significance of difference among the mean scores in academic achievement of secondary school boys having differential level of Academic Anxiety.

Source of variation	Sum of squares	df	Mean square	F-ratio	Remarks
Between sets	292	2	146		Non-
Within sets	13229	97	136	1.07	Significant
Total	1352	99	282		

An analysis of the table -2 reveals that the F –ratio as 1.07 which is less than both the values of F-ratio at 0.05 and 0.01 levels of significance i.e. 3.09 and 4.82 with the df value of 2 and 97. Since the calculated value of f-ratio is less than the table value which is non-significant. Hence, the hypothesis i.e. there will be significant difference in academic achievement of secondary school boys is rejecsted. In other words, we can say that the boys having differential level of Academic Anxiety do not differ in their academic achievement.

3.)   Study of significance of difference among the mean scores on academic achievement of secondary school girls having differential level of Academic Anxiety.

The third hypothesis is framed for verification whether the academic achievement of Secondary school girls having high, moderate and low level of Academic Anxiety differs or not.

Table-3

Significance of difference among the mean scores in academic achievement of secondary school girls having differential level of Academic Anxiety.

Source of variation	Sum of squares	df	Mean square	F-ratio	Remarks
Between sets	2819	2	1409		
Within sets	8320	97	85	16.57	Significant
Total	11139	99	1494		

An analysis of the table -3, reveals that the F –ratio as 16.57 which is greater than both the values of F-ratio at 0.05 and 0.01 levels of significance i.e. 3.09 and 4.82 with the df value of 2 and 97. Since, the calculated value of f-ratio is greater than the table value. Hence, the hypothesis i.e. there will be significant difference in academic achievement of secondary school girls is accepted and can be concluded that academic achievement of secondary school girls differs from each other.

MAJOR FINDINGS:

1. There exists a significant difference in the academic achievement of students having differential level of Academic Anxiety. The academic achievement of senior secondary learners found in inverse relation with Academic Anxiety i.e. students having high Academic Anxiety showed poor academic achievement.

2. The academic achievement of boys and girls differs significantly in relation to their Academic Anxiety. The girls are found better than boys in academic achievement but showed a high degree of Academic Anxiety also.

EDUCATIONAL IMPLICATIONS:

✓ To reduce the anxiety level, classroom environment should be free and democratic.

✓ Overburden may cause high Academic Anxiety. Thus students should not be loaded with extra burden.

✓ Avoid cramming the night before examination.

✓ Guidance services should be organized at school level.

References

Albero, P; Brown, A; Eliason, S; and Wind, J. (1997) Improving Reading through the use of Multiple Intelligence. Master's Action Research Project, Saint Xavier University and IRI Skylight. U.S.

Chapell, Benjamin Blanding, Micheal and Silverstein (2005) Test –Anxiety and Academic Achievement in Undergraduate and Graduate Students. Journal of Education Psychology. pp.268-278.

Crow, L, D. and Crow, 1969, Adolescent Development and Adjustment, Mc Graw-Hill Book Company, United States.

Gupta, M. (1987) A Study of Relationship between Locus of Control, Anxiety, Level of Aspiration, Academic Achievement of Secondary Students. Fourth Servey of Research in Education (1983-1988). Ed. M.B. Buch, New Delhi : NCERT, Vol.1, pp. 824-825.

Hussain, M.Q. (1977) A Study of Academic Attainment in Relation to Level of Aspiration and Anxiety. Third Survey of Research in Education (1978-1983). Ed. M.B. Buch, New Delhi : NCERT, pp. 667-668.

Mehrotra, S. (1986) A Study of the relationship between Intelligence, SES, Anxiety, Personality Adjustment and Academic Achievement of High School Students. Fourth Servey of Research in Education (1983-1988). Ed. M.B.Buch, New Delhi :NCERT, vol.1, p.836.

Munshi, Chitra and Mehrotra, Sushma (2011) A Study of gender differences on Academic Anxiety and Trait Anxiety among Adolescents. Bombay Psychologist 2011. Vol. XXVI. Nos' 1 & 2. pp 144-148.

Rasor, L.T. and Rasor, R.A. (1998) Academic Anxiety and Study Behaviour of Community College Students in Relation to Ethnicity, Gender and Age. California,USA.

Ramachandran, R. (1990) A Study on the Relationship between Performance and other psychological variables- Reasoning, Anxiety and Adjustment. Fifth Survey of Research in Education (1988-1992). Ed. M.B. Buch, New Delhi : NCERT, Vol.II, p.1902.

Ramakrishna, A. (2007) Effect of Anxiety Levels of M.Ed. Students on Academic Performance. Edu Track: A monthly Scanner of Trends in Education. Vol.7, No.4, p. 35.

Sharma, S. and Rao, U. (1984) Academic Anxiety research in India : A review of research. Adv. Test Anx. Res., Netherlands, 3, pp.255-264.

Saxena, Vandana (1988) A Study of the Impact of Family Relationship on Adjustment, Anxiety, Achievement Motivation, Self- Concept and Academic Achievement of High School Students. Fifth Survey of Research in Education (1988-1992). Ed. M.B. Buch, New Delhi : NCERT, Vol. II, p.1914.

Sud, A. and Sharma, H., (1989) Academic Anxiety, instrusive thoughts and attentional processes. J. Pers. Clin. Stu., 5. pp.139-145.

Sud, A. and Sharma, S., (1990) Examination stress and Academic Anxiety : A cross cultural perspective. Psy. Dev. Soc., pp. 183-201